

**Comprehensive Research on  
Contribution of Teacher Training to Primary Education Development in Nepal**

***FINAL STUDY REPORT***

Ministry of Education  
**National Centre for Education Development (NCED)**  
Sanothimi, Bhaktapur, Nepal  
March, 2010

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## Executive summary

The **purpose** of this study was to assess the contribution of teacher training programs to primary education development in Nepal. The key question that prompted this study was “What contributions have been made by the teacher training programs to the development of primary education in Nepal?” Six thematic areas of possible contribution (quality, access, equity, efficiency, teacher development and overall school development) were then derived from the purpose and scope of the study to address the key question the nine subsidiary research questions included in this study.

**Trends and gaps** established from a comprehensive review of related literature and previous research, including studies conducted so far before the establishment of NCED and after, revealed that there is no dearth of national literature on teacher training in Nepal. Such literature is available in different forms. **Trends** showed that most authentic of the literature could be categorized basically under three major clusters: literature compiled under different reform oriented commission or government documents, experience or observation-based technical reviews or assessments and limited field based research studies. Almost all of these studies were found to have been carried out in a ritualistic fashion as if they were commissioned simply to comply with the program target. They have contributed very little in the fundamental knowledge on the learning behavior of students or teaching behaviors of teachers. They also have contributed very little toward theory building on teacher training.

Major **gaps** of those studies could be identified as that- the studies were carried out mostly by commercial motives and did not constitute fundamental studies to add significantly to the knowledge base, the studies were not comprehensive to include important aspects of teacher training, they lacked in both theory and practice based significance, they have not paid attention to the actual behavior patterns of trained teachers, those studies have in general not covered the environment under which the trained teachers have to work in schools, and above all, none of those studies examined teacher training from the perspective of its impact on the various aspects such as quality, access, equity, efficiency, teacher development and overall school development as the major aspects of education system as a whole. This review showed that earlier studies were confined to classroom analysis. Only a few studies mentioned about quality and equity, for example. Thus the present study is a comprehensive research ever done in the field of contribution of teacher training. With the introduction of Wardha system of Education, Nepal introduced teacher training in 1946. It is claimed that currently 98% of the primary school teachers are trained but what is yet unknown is how these trained teachers are contributing to the quality, access, equity, efficiency, teacher development, and overall school development.

Quantitative information and qualitative inquiries included in this study represent a **sample** of 25 districts and 45 schools that represented 9 ETC ‘A’ districts, 15 non-ETC districts and Jumla from Karnali zone. In addition to Jumla, the nine ETC ‘A’ district included Kavre, Surkhet, Bhojpur, Sunsari, Doti, Bara, Tanahun, Dhanusha, Rupandehi. Likewise, school case studies taken from 15 non-ETC districts included Panchthar, Siraha, Dhading, Makawanpur, Baglung, Parbat, Puthyan, Kapilvastu, Bardia, Dolakha, Sindhupalchok, Dailekh, Rasuwa, Lalitpur and Mustang. Altogether, individual records of 4033 primary school teachers of 25 districts- from mountain, hill and terai- were analyzed. Of them, teachers who were observed and studied, 90% were having more than 5 years' experience; 52% were SLC graduates, 35% were higher secondary school completers, 11% were bachelor

degree holders, and 2% were masters' degree completers. All of these teachers had attended ten months' teacher training over the periods.

**Methodological approach** adopted in this study was a blending of quantitative analysis and qualitative inquiries. Eleven sets of tools were used in this study. They were (a) School information forms (b) Student information forms (c) Teacher information forms (d) Teacher interview questionnaire (e) Head-teacher interview questionnaire (f) Focus group discussion (FGD) guiding questions (g) FGD notes (h) Observation instrument (i) School case study guidelines (j) School report summary forms, and (k) Achievement tests for Grade III core subjects (English, Nepali, Math, Social Studies) and Grade V core subjects (English, Nepali, Math, Social Studies), and Score sheet for test score records. Apart from this, the field researchers prepared 15 case studies of the teachers and the schools as well, following the school case study guidelines.

**Analysis** and cross-checking of the quantitative data obtained from different sources were conducted by using Microsoft Excel software in the computer. Likewise, qualitative information was clustered thematically and analyzed on the basis of informant wise classification. On the basis of these classifications, the team of researchers and educationists together, organized series of discussion sessions over the crude data and information for common understanding of the meaning and implications on the themes of inquiry. Following the discussions, individual experts from the core study team prepared the thematic chapters of the report. Analysis of the data/information was done through periodic mutual sharings and feedback given to and received by the team of writers and the client on the thematic outcomes.

**Major findings** of the study showed that:

1. Teacher training has contributed to improve teacher-student relations, students are more actively involved in learning and more project works are given.
2. There is an apparent increase in the students' motivation to learn and succeed. Varieties of teaching methods are used by teachers and better results are achieved due to improved objectivity in assessments.
3. GPI has been improved in terms of enrollment, repetition, promotion, and dropouts. There is an increasing rate of female students in primary grades; underprivileged, backward, dalits and deprived communities are encouraged to send their children to schools.
4. Trained teachers are supportive to school management. In most cases, teachers have become instrumental in improving school community relations.
5. Training has contributed to ensure equity in education, most school age children are found enrolled at schools. Teacher's behavior is found largely non-discriminating. There is reduced corporal punishment and schools welcome students from all castes, tribes and communities.
6. Students' learning achievement tests showed that there is indeed an increment in the learning achievement scores. Gain score is discernible in English and Math, for example. There is an increased rate of retention, pass rate has increased, dropout has decreased, teachers' time on task has increased.
7. Teacher collegiality has improved. Trained teachers learn and try new things. Study habits have improved. Trained teachers make better use of text books and curricula and are engaged in child-friendly teaching.
8. Trained teachers are found contributing to school image and community relations, they are supportive to SMC and head teachers, accept non-teaching assignments and maintain better record keeping at schools.

9. Trained head teachers were found better able to utilize and preserve the ability and willingness of the trained teachers. This study found that trained teachers were instrumental in physical improvement of the schools, establishing community relations, positive image building of the school and in some sporadic cases they were improving the quality of education at par with the parental expectations.

**Conclusions** drawn from the reflections on findings over the contribution of teacher training towards improving quality, access, equity, efficiency, teacher development, and overall school development can be summarized that:

1. Teacher training helped building teacher confidence through additional knowledge and skills learned. However, the application of training program has yet to demonstrate specific impact on teaching and learning.
2. Teachers are increasingly involved in the process of increasing access to education. A gradual increase in enrollment is quite easily discernible however, due to the saturation of student enrollment in schools, significant increases are not apparently seen in the data records of over the last five years.
3. There is humble effort made by trained teachers in ensuring equity in all aspects of school education by motivating parents, students and local community.
4. Students learning achievement has shown a gradual increase over the years. However, substantial contributions of teacher training towards improving systemic efficiency was not observed.
5. Teacher training has substantially contributed to increase teacher efficacy, collegiality and professional growth of teachers.
6. Trained teachers have contributed to improve positive public image of schools. The interactions between student and teachers have increased significantly including co-curricular activities in schools. Personal hygiene and sanitation improved. Participation of communities in school management has been influenced by trained teachers.
7. Additionally, (a) teachers themselves and other stakeholders have acknowledged the importance of teacher training to inculcate the required teaching skills in them, (b) training curricula expected too many things from teacher that s/he could not yield in reality, (c) teachers did not get encouraging and/or reinforcing environment to implement their learning into action due to inadequate monitoring and follow up, and (d) teacher training programmes contributed less (as compared to what was expected) towards the improvement of quality, access, equity and efficiency; and contributed more towards teacher development and overall school development initiatives.

**Recommendations**, this study came up with, are derived from the study findings and conclusions. Policy makers, educationists, curriculum designers, training providers, teachers and school management could benefit from the recommendations offered to them as listed below:

1. Teacher training packages and the needs of the schools where the trained teachers work should match with each other. In other words, organizational needs and individual needs should match for training effectiveness. This matching could be made possible if we develop modular teacher training packages under a single continuum. Teacher-training package must be redesigned to address the needs of various types of schools. For this, schools should be categorized (in terms of geographical and linguistics regions) and the proposed modular teacher-training packages should be reorganized accordingly.
2. Internship component of the third module should be given as first module. Based on field experiences, trainers must train the teachers not only theoretically but also practically.

This provision demands a rigorous but field based master trainer program. If provisioned this way, the training guidelines/directives should be reformulated.

3. Since every stakeholder is interested to know the difference between the behaviors of the trained and the untrained teachers, it is worthwhile to keep log on teachers' initiatives and demonstrated behaviors in the school's context. For increased ownership of the process and outcome, such work-log could be prepared in consultation with teachers themselves, teachers unions and SMC/PTAs and be distributed to the teachers for their record keeping purpose. Researchers could cross check the findings of the log and prepare report for wider consumption.
4. With few exceptions, teacher and all stakeholders of education have acknowledged the importance of teacher training. Following this acknowledgement, teacher training providers should develop a form to obtain through individual schools, their intended contents and methods to be incorporated in the teacher training modules. Materials thus collected should be analyzed at the resource center level and be compiled at the national level for the necessary revision in the teacher training curricula. This approach will constitute a comprehensive needs assessment for training.
5. Since teachers experiences ranged from 5 to over 25 years, a longitudinal study is required to examine the relationship between trained teachers' years of experience and their contribution to improve the quality of education.
6. Teacher development demands collegiality and the trained teachers were found gearing towards it. This finding requires on going support to the trained teachers for their strengthened collegiality. Provision of reward and punishment to teams of trained teachers could help improve teacher collegiality for increased performance.
7. Trained teachers were found instrumental for overall development of school. On the basis of this finding, the study recommends making trained teachers more assertive for the desired transformations in education and the system should be geared to support them through resource centers. Currently, resource centers are performing less than what is expected of them by the system.
8. Findings of this study showed that there is a severe lack of refresher training including follow up, monitoring and evaluation of the trained teachers' performance. This leads to the recommendation that training providers and sending schools should together design support strategies needed before, during and after each training.
9. Findings indicate that trained teachers working with head teachers who are trained in school management are better performing both teaching and non-teaching assignments. To encourage their initiatives for school development and improved community relations, head teacher training should also be revised by incorporating behaviors that could enhance possible contribution of teacher training to different aspects of quality education.

## **List of abbreviations**

ADB	Asian Development Bank
AE	Alternative Education/Adult Education
AP	Alternative Provider
DDC	District Development Committee
DEO	District Education Office/Officer
ECD	Early Childhood Development
ETC	Educational Training Centre
FGD	Focus Group Discussion
GER	Gross Enrolment Ratio
GPI	Gross Promotion Index
MOE	Ministry of Education
NCED	National Centre for Education Development
NER	Net Enrolment Ratio
PTA	Parents Teachers Association
RC	Resource Centre
RED	Regional Education Directorate/Director
RP	Resource Person
SIP	School Improvement Plan
SMC	School Management Committee
SSR	School Sector Reform
TAF	Teaching Assessment Form
TEP	Teacher Education Project
TITI	Training Institute for Technical Instruction
VDC	Village Development Committee

### **Definition of terms**

Access	Right of entry or admission of children to educational institutions
Accountability	Responsibility of actions with ownership and belongingness
Assessment	Judgment of the extent of learning achievement
Competence	Availability of skills and knowledge to perform
Competency profile	Inventory of skills needed to perform professionally on the job
Drop out	Cases and conditions of leaving school before completion
Efficiency	Ability and willingness to do the right things
Enrolment	Admission to school or other educational institution
Equality	The condition of non-discriminatory access to opportunities
Equity	The condition of fair share in terms of access and treatment
Evaluation	Decision to rate and grade the extent of achievement
Failure	Inability to meet requirements for a pass and promotion
Latent factors	Potential influencing elements other than hypothesized
Learning achievement	The extent of rate of success and degree of quality performance
Liberal pass policy	Flexibility in grade promotion upon completion of duration
Performance	Demonstrated ability to 'do' as expected
Promotion	Upgrading to higher grade or scale
Quality	Level of overall achievement and performance improvement
Retention	The condition of remaining actively engaged until completion
School development	Physical, social and institutional growth of school and its image
School image	Public impression and credibility of school as an institution
Self-efficacy	Exhibited ability and willingness to perform better than before
Social audit	Open public audit of financial and other public transactions
Social inclusion	Opportunities for all segments of population to be part of
Teacher collegiality	Team spirit and collaboration among teachers in school affairs
Teacher development	Improvement of teachers' ability and willingness to perform
Transfer of Training	Retention and application of knowledge and skills from training to workplace.

## CHAPTER I: INTRODUCTION

### **Background and context**

In response to the increasing demands of primary schools and teachers, education system in Nepal, among other investments, has been investing in the training of these teachers of primary schools. Although several donors have backed this mission for many decades now, we are still facing a challenge of building teachers' capacity through a systematic management and organization of training programs.

It is not only about providing training, but also about the questions of training effectiveness which is arguably constrained due to inadequate transfer of learning from the training environment to the workplace environment. It is often argued that in most cases, not enough attention is given to what happens before, during, and after completion of any training. Previous studies in the field of education and training- including those in different areas of teacher training, psychology, motivation, pedagogy have greatly influenced the trends of teacher training with the students' level of achievement and school image as the intended results. In addition, philosophy and meaning of training effectiveness suggests that if the knowledge, skills, and attitudes from a training environment are carried over to the school environment with a relatively smooth transition, then the training is rated as effective and successful. However, the alarming wastage of physical and human resources, including the loss of time, efforts and energy, indicates the volume of lost opportunities in education. Teachers in primary schools are not an exception. This situation raises questions about contribution of teacher training programs to primary education development in Nepal and that is what prompted this study.

This study attempted to bring together the different themes on teacher training programs to primary education development in Nepal so as to consolidate our future efforts in a more meaningful manner.

What is the contribution of teacher training programs in relation to key education development indicators such as student achievement, reduction in drop out rate, access and improvement in professional capacity of teachers? What about training effectiveness? Such as what actually happens in the classrooms? Is teaching geared towards students' learning and performance? Does this process follow any findings from research on effective teaching? How do students participate? Are the teachers committed and enthusiastic? How are 'corporate identities' and 'school cultures' established or maintained? How is the school leadership influencing effective teaching and learning? Do teachers make self-assessment based on students' learning and subsequent achievement? Are parents concerned about the extent of overall development of children? What are the evidences or instances that exist and do verify answers to such inquiries? Similarly, what needs to be improved in the teacher training curriculum? Do the curricula address the needs of overall development of children receiving primary education? Is the current policy of teacher training of primary education programs correlate with the existing training programs?

### **Purpose of the study**

The purpose of this study was to ‘assess the contribution of primary teacher training programs to the development of primary education in Nepal’ with reference to variables indicators reflecting the following ‘constructs’ that characterize the contribution of teacher training to different aspects of quality of education:

- Quality
- Access
- Equity
- Efficiency
- Teacher development, and
- Overall school development.

Utilizing both quantitative and qualitative methods, this study aimed at capitalizing on the studies conducted so far on teacher education, training and quality of primary education. In addition to preparing an anecdotal record of related previous study reports, an attempt has been made to conduct a ‘comprehensive analysis’ of such reports by capturing the essence of teacher education towards the development of quality of primary education in Nepal.

### **Key research question**

Key research question that prompted this study is as follows:

“What contributions have been made by the teacher training programs to the development of primary education in Nepal?”

### **Subsidiary research questions**

To address the key research question, the following subsidiary questions have guided the process and outcome of this study:

1. What is the empirical evidence of the periodic changes (improvement) in overall student’s achievement?
2. What is the empirical evidence of the periodic changes (improvement) in educational wastage?
3. What is the empirical evidence of the periodic changes (improvement) in access of different groups, including marginalized community to schooling?
4. What is the empirical evidence of the periodic changes (improvement) in the teachers’ overall capacity for teaching delivery and school development?
5. To what extent has the learning achievement of the trained teachers from the teacher-training program been transferred to the teaching learning performance in the classroom?
6. To what extent the teacher training and head-teacher training are related (statistically as well as interpretively) to the improvement in the key indicators of primary education development?
7. How have the teacher training programs addressed the ecological, regional and cultural variations across Nepal?
8. What are the possible latent factors, which may have affected the changes (positive and/or negative) in relation to inquiry under various research questions?

9. What specific strategies and policies are imperative for effective teacher training program in the face of emerging requirement of pedagogical and school management context in Nepal?

### **Study themes**

Quality, access, equity, efficiency, teacher development and overall school development were the six identified and agreed upon themes or research constructs as aspects of this study. This assessed 'the contribution of teacher training programs to the development of primary education in Nepal' with reference to these constructs as the study themes. In conjunction with the six constructs, nine research questions have been addressed in this study using both primary as well as secondary data. Empirical evidences for answering the questions were sought for in this study by means of quantitative as well as qualitative approaches to data collection from multiple sources and from their analysis. Although all research questions are related to contribution of teacher training to primary education development, a most likely corresponding linkage between the individual research question and the identified constructs was created in the form of a working matrix for the purpose of this study.

### **Conceptual framework of the study**

Contribution of teacher training interventions towards the development of the quality of primary education in the context of Nepal (that this study attempted to investigate) is of course a complex issue and an interpretation of the conceptual understanding of the issue has been reflected with the help of mind-maps showing the six different constructs as study themes and their associated elements. Among all possible contributions of teacher training program interventions, major themes (or research constructs) addressed in this study have been identified as- quality, access, equity, efficiency, teacher development and overall school development.

Variables taken into account in the process of this study have been summarized and visualized in the second mind-map. Each construct or theme has been interpreted as being inclusive of different clusters of variables. These are- teacher variables, student variables, physical facilities variables, school type variables, STS/SCR and school environment variables. In addition to the trend of retention of teachers, enrollment trends and cohort of students at the schools were analyzed for assessing the contribution of teacher training with reference to its contribution towards different aspects of quality of primary education. Each theme included in the study design assessed analyzed all available evidences that could be evidently collected and associated with the contribution of teacher training.

Figure I:

**Themes and constructs**

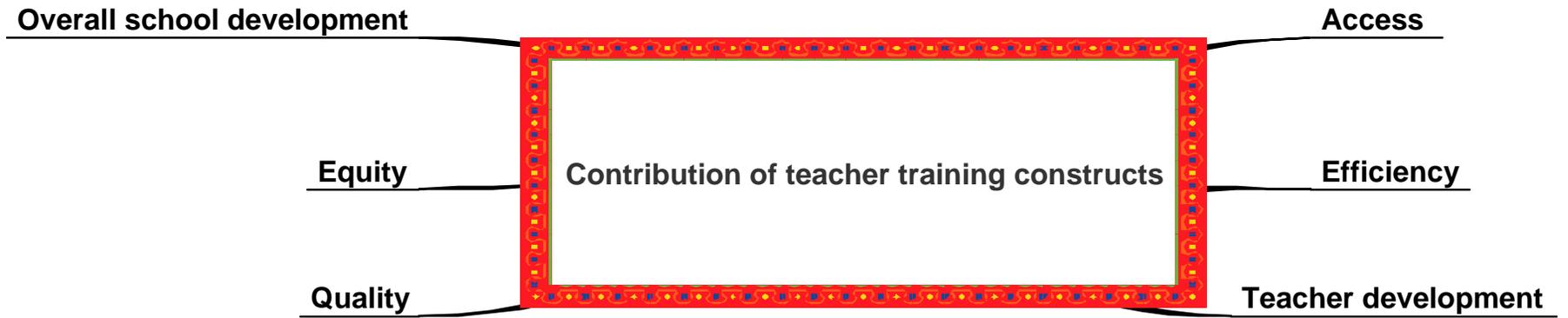
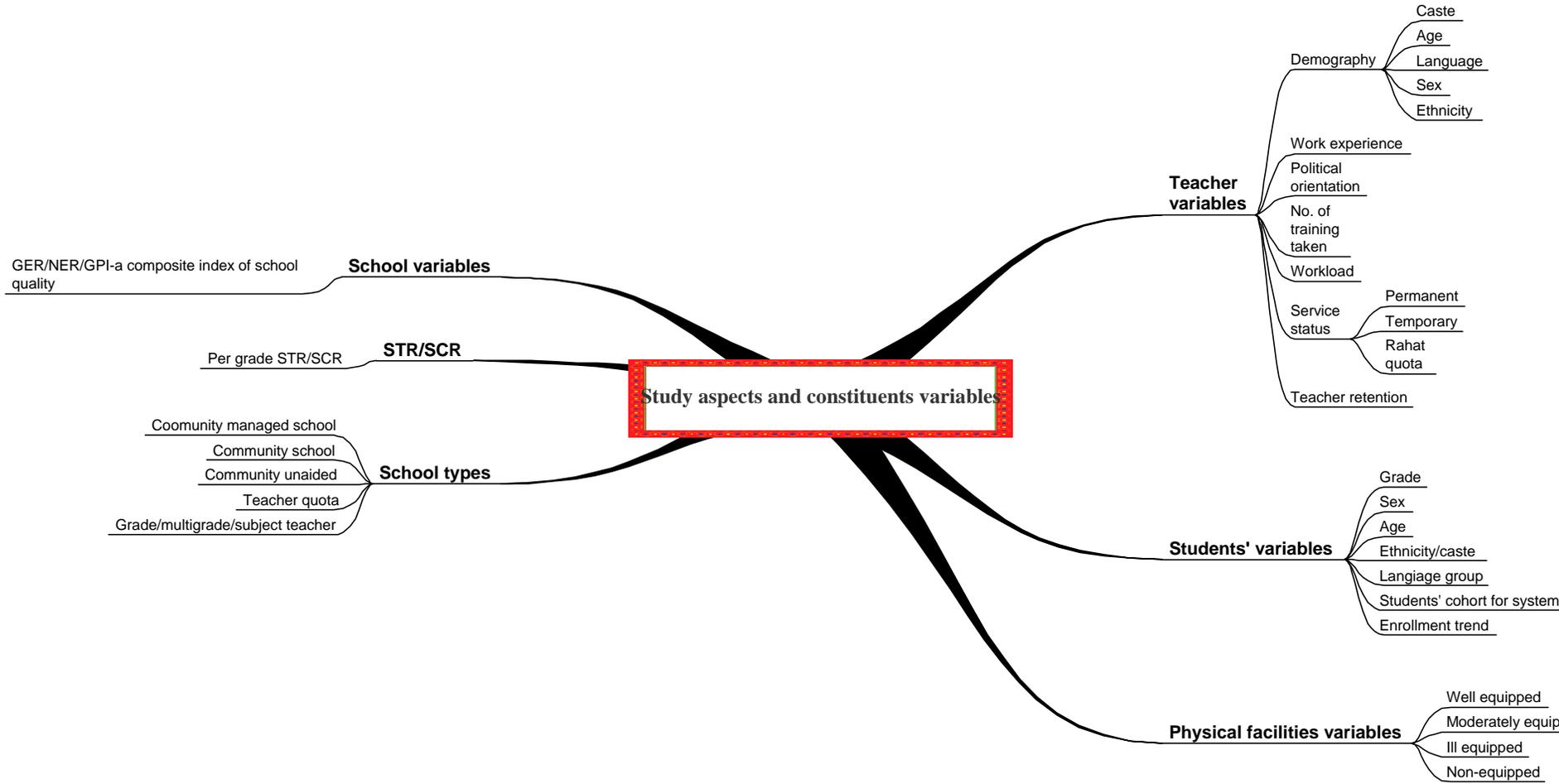


Figure 2:

### Study aspects and associated variables



**Project deliverables**

1. Inception Report containing conceptual framework, variable identification for study constructs and a framework for the selection of methods, samples and sites for collecting quantitative and qualitative data.
2. Interim report, in the form of status report, indicating the fielding and administration of the study.
3. Draft report of the study.
4. Final report (in English and Nepali) after dissemination at a national seminar.

**Limitations of the study**

In terms of sample and coverage, this study is limited to 45 schools of 25 districts. Although schools from all geographical regions (mountain, hill and terai) and zones (13) have been included, sample size is still not big enough for stratified inferences and generalizations. Likewise, generalizability of the findings and conclusions of this study is limited by the extent and availability of the cross-sectional data, both quantitative data and qualitative inquiries, covered by this study.

## **CHAPTER II: REVIEW OF LITERATURE**

### **Review of previous study reports**

#### **Review of national literature on primary teacher training in Nepal**

##### **Introduction**

Development of teacher training in Nepal has followed the course of development in education. A number of teacher training programs have been initiated with changes in national system of education in the modern context. This chapter makes an attempt to review the available literature in the contexts of the development of teacher training especially primary teacher training program in the country. Section A tries to make a brief review of major available literature in the development of teacher training in the country up to the present. Section B presents a review of studies on teacher training commissioned either by NCED or the Department of Education (DOE) and other relevant agencies. Finally it also attempts to present the trends and gaps in the studies which indicated the need for initiating a comprehensive study on primary teacher training in Nepal.

##### **Section A**

###### **Review of General Literature on Primary Teacher Training (before NCED)**

Training of teacher is basically aimed at teacher's development which is considered very important for developing education in a country. Even though teacher development had a special significance in the ancient systems of indigenous education, the concept of teacher training in the modern sense of the term in Nepal dates back to 1948 when the Basic Teacher Training Center was established to train primary teacher in the wake of the implementation of Basic Education in the country. However the centre was short lived and was discontinued because the basic teacher training program could not sustain longer as the Rana regime which attempted to emulate the Gandhian philosophy of education, came to an end with the political change of 1951. Therefore the year 1951 can be taken as a logically justifiable starting point for a literature review on primary teacher training in the context of modern Nepal. There are a number of milestones in the history of educational development following the political change of 1951. Changes in the education system have produced corresponding changes in the teacher training program.

###### **Teacher training as recommended by NNEPC 1954**

In the modern context the need for teacher training in Nepal was first realized immediately after the political change of 1951. This is clearly enunciated in the report of the Nepal National Educational Education Planning Commission (NNEPC) of 1954. Even though the report of NNEPC presented the detailed study of education that was required for the development of Nepal in the modern context, the review of teacher training under reference is based primarily on what has been discussed in chapter 12 of this report entitled Training of Teachers. As spelt out in this report, the major purposes of teacher training were as follows (NNEPC, 1956:163-164):

- To provide competent teacher to staff the schools of Nepal.
- To provide for the development of a common curriculum and common methods for schools, and to contribute to the continuous improvement of education.

With this purpose in mind the commission aimed at producing teachers who had to be (i) professionally competent, (ii) academically possessed with a good general education to serve them as teacher and as adults, (iii) personally competent in the basic vocational crafts and in the skills required to teach them, and (iv) personally developed and skilled in the process of continuously improving themselves. To fulfill the objectives, the commission suggested four types of training that had to be coordinated under a single institutional organization constituting (i) short term training courses for large number of primary teachers (ii) courses for training staffs of the teacher training centre (iii) courses for the upgrading of the present teacher and finally (iv) a degree granting college of education.

As suggested by the commission, the curricula of teacher training were to include general education, craft education, professional education and personal development of the teachers as per need. This training program has to be taught by the most modern method known and evaluated along lines consistent with modern education. A system of teacher certification was also suggested to insure that only qualified teacher were permitted to teach in the schools. Forming of a national teachers association was recommended to setup standards and codes of ethics and to strengthen the teaching profession. As salary scale based on training and experience along with provisions for leave, retirement and amenities were also recommended to keep up motivation among the teacher cadre.

### **Teacher training under NESP**

The national education system plan (NESP) prepared for a five year period (1971-76) was based on the experiences of implementing different educational reforms in the country. Though it was based on a number of practical observations and experiences, the report looked like a planned document rather than being a study report. As with NNEPC 1954, the NESP contains all important aspects of education including training of teachers.

The planned document clearly stated that the paucity of trained and qualified teachers had created a big obstacle on the way to the development of modern methods of teaching and pedagogy, as the education sector could not attract talented and more qualified individuals who instead considered teaching a profession of low priority. The NESP document also mentioned a number of measures that were to be adopted in order to implement teacher training activities in the country. Most important of these measures included the following (NESP, 1971):

- Increasing the number of trained teachers
- Raising standards of training
- Placements of teachers on the job after training
- Improving teaching service and the life

### **Teacher Training as reviewed in 1982**

Shrestha (1982) in an article on Teacher Education in Nepal has succinctly tried to review the development of teacher education from the days of the NNEPC 1954 up to the decade following the implementation of NESP in 1971. In his review of the development of teacher training, he has attempted to briefly assimilate the major initiatives that were taken as result of the recommendations made by NNEPC 1954. He says that the presentation of NNEPC report was followed by an agreement between the government of Nepal and the US government in which the later agreed to provide substantial financial assistance for educational development in Nepal. This program of training teachers received prime focus of assistance with the establishment of college of education and normal school program. Though the prime purpose of the establishment of these two institutions was to produce trained teachers for schools, their contribution in other spheres of Nepalese education has been more

significant. In fact, these teacher training institutions did pioneering work in total education system. As recommended by NNEPC, mobile normal schools were setup in different parts of the country to train primary school teachers. The normal schools offered a ten month professional training program for students who had passed grade 8. Similarly the college of education of education was established to train secondary school teachers. It provided a four year B. Ed. Program for teachers who had passed School Leaving Certificate (S.L.C) examination. A one year B. Ed. Was introduced to train graduates from other disciplines. Later on the recommendation of the All Round National Education Committee (ARNEC, 1962), which was setup to recommend reforms in education to make it suitable to the changed context of the Panchayat polity, the Permanent Teacher Training Centers (PTTCs) were established in selected parts of the country, discontinuing the mobile normal school network.

The contribution made by the normal school program in carrying the message of modern education to the remotest part of the country has been invaluable. Though the quality of training was far below expectation, that was the period of crash programs and the normal schools rightly carried out the mission..Shrestha further argues that shortage of teachers (trained/untrained) posed serious problems in the progress of expansion of education facilities in the country. This shortage was identified mainly in the areas of science, math and English teachers, female teachers and teachers especially in the primary schools of the remote areas. A variety of training programs like science teaching enrichment program (STEP), program for the revision and Improvement of math education (PRIME) and teacher educators program etc were also initiated apart from regular programs of college of education and normal schools.

Assessing the impact of NESP (1971-76) on teacher education, Shrestha argued that the most important policy decisions that were initiated to meet the implementation requirements of the plan were the following;

1. Training was made obligatory to get permanent tenure in school teaching
2. Teachers' salary was drastically raised to make it comparable to other jobs with similar academic qualifications
3. Provision was made to ensure the monthly payment of salary for teachers
4. Salary differential was introduced between trained and untrained teachers
5. System of partial training allowance was introduced for partial training

The adoption of NESP in 1971 opened new prospects for the development of teacher education. NESP also posed a new challenge to teacher education institutions. To meet this challenge, all teacher training institutions, the College of Education, the Primary School Teacher Training Centers, the National Vocational Training Centers, and the English Language Training Centers, all under the MOE were amalgamated into the Institute of Education (IOE) under the Tribhuvan University (T.U.). The IOE became the sole agency responsible for teacher training and related activities.

The NESP tried to help improve school teaching programs as much as possible adopting various measures. It crossed even the frontiers of administration and imposed the IOE to develop an academic program in which teachers would be able to upgrade their academic standing through training with a built in career ladder introduced in the training program. Another important factor that affected the quality of teacher's training has been the gradual reduction of budgetary support for this program. There were other important reasons as well in the deterioration of the quality of training. Nearly 50 percent of trainers of IOE possessed less than the desired academic qualifications. The situation was still worse in the area of vocational teacher training. Moreover, the accelerated expansion of teacher training programs

had forced the IOE to appoint sub-standard teacher for all the outlying campuses. Most of these teacher educators had no experience in school teaching nor had they received pre-service workshop.

On the other hand, the intake of teacher trainees was also not up to the expected standards as the students that sought admission to the teacher training campuses ranked this program as their last preference. Similarly, the academic standing of in-service teachers sent for training had been very discouraging. In general, academically less competent teachers joined the in-service teacher training program of IOE.

### **The ADB education sector study**

This study was conducted by an ADB mission in 1985 with a view to collect information on different aspects of the education sector to develop a country profile of education in terms of indicators that could be useful for the country for planning purposes and to the bank for country programming with reference to education. Being a sector study it covered all aspects of education including teacher training which was dealt in chapter 7 titled 'teacher education'. The study tried to cover in brief the development of teacher education including major activities carried out and the number of teachers trained following the implementation of the recommendations of NNEPC 1954 and NESP 1971. It also included a brief review of the nature of courses offered under different levels of teacher trainings including in-service primary teacher training which covered the package program of 5 months duration implemented by IOE. The report also covered the major positive and negative aspects in the course of development in teacher training in the country. For instance, it included facts like the boom in enrollment of teacher education campuses of TU following implementation of NESP and the decline in enrollment following the waiving of mandatory requirement of training for school teachers after 1980. Together with deterioration of the quality of training imparted in IOE campuses as a result of the expanded crash teacher training programs without adequate preparation and budgetary support and the integration of teacher education campuses into multiple campuses leading to low priority accorded to teacher education programs provided by the campus administration which generally happened to be dominated by faculties other than teacher education.

This study also emphasized the training of women teachers which was in operation through a UNESCO/UNICEF/NORAD funded program of Equal Access for Girls and Women for Education which later turned into education of girls and women with a specific objective of improving girls' schools enrollment and enhancing access to women for becoming school teacher. This study considered two training programs namely teacher training through distance learning and teacher training through radio education that were running at that time as innovative training programs because these modalities were perceived effective to address the long standing problem of teacher training. Finally the study considered the training and updating in both content and pedagogy of a large number of untrained teachers (25000) as the most immediate problem to be addressed as a crash program by the government. It also recommended the need for both pre-service and in-service training which required periodic updating of the professional competencies of trained teachers. The need for revising the training curricula to suit the socio-ethnic context of the country and orientation of teacher training to new methods and training methodologies were also recommended with other suggestions for improving teacher training. It also recommended the need for setting up teacher training centers through in-depth analysis of requirements of serving teachers.

### **Primary teacher training under the basic need program (1987-2000):**

Based on the past experiences of implementing primary teacher training, a short training program of one month duration focused at imparting teaching skills to all SLC passed

teachers of primary schools was planned as part of the goal of attaining universal primary education by the year 2000 AD under the basic needs program of the Government of Nepal. According to the MOE document, The Basic Needs Program in the Education Sector (1988) was aimed at attaining hundred percent target in teacher training which was only 30.9 percent at the beginning of its implementation in 1987. This assessment was prepared considering both the number of untrained teachers at the time of estimation (that was approximately 37348) along with the number of new untrained teachers that would enter the teaching cadre (approximately 34852) by the year of target attainment. Thus, the program had set this target within a period of 13 years. The time bound program had specifically mentioned the number of teachers to be trained each year with the amount of money required to accomplish the task. This teacher training program was popularly known as 150 hours training which was considered the basic in-service training for primary school teachers.

### **Teacher training as reviewed in 1988**

The Education and Human Resources Sector Assessment (1988) study was carried out under a USAID funded project “Improving the Efficiency of Education Systems” conducted by a Florida State University team which was coordinated by the Ministry of Education and Culture with USAID. The report of this study has a chapter on Teacher Education. This study has a number of assessments some of which are briefly presented below. These assessments were made on the basis of information available through interviews in Nepal with knowledgeable and experienced educators, review of relevant documents and reports and the guidance of the steering committee.

According to the assessment of IEES (1988) study, the expanded role of IOE had both favorable as well as adverse implications for the development of teacher education. Consistent with the expanded role, the scope of IOE’s activities was considerably enlarged and diversified. In order to cope with the new challenges, the IOE was compelled to stretch its training capacity to the maximum to produce sufficient number of trained teachers within a short period of time. Consequently, the academic nature of the IOE programs had limited immediate impact on school teaching. Moreover the integration of the education campuses into multiple campuses of T.U. resulted into a gradual deterioration of the quality of teacher training conducted through the IOE. Meanwhile the seventh amendment of the Education Act in 1980 acted as a counter measure to curb the further growth of teacher education because under the new provisions training was not considered compulsory for obtaining tenure in teaching (IEES, 1988).

During the 1980s, the IOE, the umbrella institution of teacher training under TU experienced a decline in student enrollment and a reduction in the scope of its activities. Meanwhile, MOEC had undertaken various innovative projects mainly with external assistance in which training of teachers had been a major component.. As observed by this study teacher training program got organized under two major institutions after the 1980 amendment of the Education Act. The long term in-service and degree oriented programs were conducted at the education campuses of TU whereas the short term in-service training was managed by different agencies under MOEC Apart from the degree oriented programs, there was also a non credit 10 months women teachers training program focused at the disadvantaged population of remote rural areas to send them back to villages as primary teachers with an objective of raising girls’ enrollment in primary schools. However, despite considerable progress in this area the pre-service programs as assessed by the study were found to be mostly theoretical and academic in nature. The internal efficiency of these programs was less than satisfactory and their impact on schools was also less than expected.

There were five major in-service training programs running at that time. The five months package was a special non credit training aiming at imparting teaching skills to the primary

teachers. The radio education teachers training was designed under a USAID project to increase access to training for rural and remote area teachers. Training was delivered through regular radio broadcast (165 hours) supported by self learning materials. The RETT I was designed in 1980 to provide professional training to under SLC teachers and RETT II in 1984 aiming at developing a radio course in English, math, science and Nepali. The Seti education for rural development project with support from UNDP/UNESCO/UNICEF in 1982 started short 21 days training program for primary teachers followed by 7 days refresher training in the succeeding years. Consistent with the philosophy of the project to make education a force for rural development, this project's teacher training was focused on instructional improvement and linking school activities with rural development. Most of the training was organized in resource center (RC) schools which were the leading schools in clusters of 8-12 schools. The best teachers were also awarded with a 10 month training opportunity at the project headquarter.

The World Bank funded primary education project in 1984 conducted a short term 12 days teacher training program followed by 10 and 9 days refresher training in succeeding years. The training program was conducted in RC schools. This project followed a cascade system of training under which the central project staff trained by UNICEF and National Experts imparted training to the resource person (RP) who in turn conducted training to teachers in the RCs. The science education project started under ADB funding in 1984 conducted teacher training especially in science and math to improve the quality of teaching in the 6-10 grades of secondary schools using a network of RCs called Science Education Development Units (SEDUs) staffed by science master trainers (SMTs).

According to the assessment of the study the output of the five month package program was low and decreasing over the years and systematic evaluation to determine its impact was not available. Empirical evidence existed to show that RETT successfully reached the target group of untrained rural primary teachers with some impact on their knowledge of education and subject areas of curriculum. Research evidence also existed for SERDP teacher training to have positive impact on classroom teaching. Similarly, PEP teacher training as indicated by research evidence were also effective in changing traditional approaches in teaching and encouraging wider range of teaching behavior among teachers.

This study came to the conclusion that the capacities of ongoing teacher training program were far below the requirements, the emergence of different directions and modalities of teacher training was due to the absence of coordinating structure and lack of clarity with respect to the functions, the teacher education planning was generally done in isolation without due consideration to plan for preparing teacher trainers and developing support system for newly trained teachers and finally the teacher education program was in general hampered by not being considered a professional preparation program.

### **The CANEDCOM Study**

This study was commissioned by the ADB in 1988 following on the recommendations of the education sector study to undertake an in-depth study of teacher education in Nepal. This study focused on the analysis of the major problems and issues relating to primary teacher training under the five sub-headings as follows; a) policy and planning b) content and modality c) Management and coordination d) quality of instruction and external efficiency e) financing of primary teacher training. According to the study primary teacher training program was suffering from a state of disarray. It had arrived at this state due to abrupt changes in policies and programs and the resulting struggle for ownership between MOE and IOE or FOE of TU. There were a variety of programs and delivery systems in the training programs. The content of these training programs was not adequately reflecting the needs of the country and the methods were also in need of updating with modern technologies in

educational pedagogy. The study stated that despite variety of programs and delivery systems there was a dearth of data on the effects of the program to select cost effective programs. The CANEDCOM study accepted the efficacy of the 150 hours training package, endorsed the RC modality of SERDP and PEP trainings. The report contained more than 80 recommendations to improve teacher education and the detailed proposals for seven stand alone projects. The major recommendations focused on the establishment of a national primary teacher program constructed on a cascade basis to include ministry of education, zones, districts, mobile teacher training units and school cluster trainings. It also pointed out the need for the development of a cadre of teacher educators strengthening management and improving data system.

**The CERID study of 150 hours primary teachers training:**

CERID carried out an evaluation study of the basic primary teacher training program in 1990 under the title *Aadharbhoot Prathamik Sikhak Talim Ko Prabhawkarita* (Effectiveness of the basic primary teacher training). The major focus of the study was to compare teaching performance of untrained and trained teachers under the short term training program. Apart from an attempt to compare the development of attitude among trained and untrained teachers it also sought to compare the level of achievements among students taught by both trained and untrained teachers.

The findings of the study were based on a sample of teachers who were selected from 5 districts representing all development and eco-zones of the country and who had completed one year experience teaching Nepali in grade 3, math in grade 4 and English in grade 5 after training in package I, II and III of the 150 hours training respectively. The selection also included schools where trained and untrained teachers were teaching the said subjects in the said grades. The major study tools used were mainly school survey form, interview schedules, teacher attitude forms, questionnaires, class observation forms and achievement tests.

The study reported that about 30 percent teachers only had satisfactory knowledge of subject matter of their teaching subjects. The trained teachers were more competent than the untrained teachers and were using physical punishments to teachers less frequently. The trained teachers also used teaching materials more than the untrained teachers. The most frequently used teaching methods were question answers, drills, dramatization and demonstration according to their lesson. About 93 percent teachers used them compared to only 40 percent by untrained teachers. Similarly, trained teachers used evaluation techniques more effectively and devoted more time in extracurricular activities. Trained teachers have more positive attitude towards teaching although difference was not appreciable. There was no difference in the achievements of students in Nepali taught trained and untrained teachers. In math only the learning achievements of students taught by trained teachers was higher than those taught by untrained teachers. In English it was even lower among students taught by trained teachers. The student achievement in English was less than 40 percent on average. The study has made a number of recommendations in order to make it more effective.

**Primary teacher training under the ADB funded PEDP:**

The Primary Education Development Project approved by ADB in 1991 had teacher training as its major component. The project objectives could be briefly stated as follows;

1. To develop structures that will help achieve teacher training targets through the establishment of National Center for Educational Development (NCED) and nine primary teacher training centers (PTTCs).
2. To develop teacher training curricula, materials and trainers.

3. To develop programs of training for head masters, supervisors and other personnel engaged in the management of primary education.
4. To assist the FOE/TU to prepare manpower for primary education.
5. To rehabilitate primary school facilities

While objective 1 to 4 aimed at improving quality through improving teaching and management capabilities of staffs involved in the school education sector, the final objective was related with the enhancement of access in primary education through rehabilitation of primary schools facilities in the country. As is evident from the objectives the project appear to have been designed with a view to address the need of institutionalizing training program through setting up an umbrella institution of teacher training apart from preparing educational manpower including primary teachers and management personnel adequately equipped to carry out their expected functions professionally to augment the quality of primary education. The rehabilitation of primary school classrooms had envisaged the need for improved physical environment as a pre condition for creating conducive instructional environment for joyful learning on the part of primary school children.

However, as the project was designed in the background of governments contemporary basic needs program of the education sector, the major focus of the primary teacher training intended by the document appear to follow the short term training of 150 hours adopted by MOEC. But the proposed primary teacher training program later developed into a 10 month basic teacher training during the implementation of the project as it coincided with the time of the National Educational Commission (NEC) 1991-92 which had recommended the need for a long term basic teacher training. The project document clearly specified the number of educational personnel to be trained including primary teachers and the financial resources required for the attainment of Universal Primary Education (UPE) by 2000 AD.

### **Primary Teacher Training under Basic and Primary Education (BPEP) Master Plan 1991-2001**

The master plan was prepared with a view to suggest ways to achieve the target of UPE by the turn of the 20<sup>th</sup> century. The planned document also included teacher training as one essential aspect while reviewing the status of primary education in the country. This exercise was sponsored by the ministry of education with technical and financial support of UNDP. It included substantive incorporation of reviews, comments and criticisms by various officials and experts on the preliminary drafts prepared by a team of consultants.

The document presented a brief review of teacher training according to which the major in service primary teacher training programs conducted under different MOEC agencies included; the 150 hours basic teachers training of 1 month, 21 days of training of SERDP, 12 days training modules of PEP and RETT. A 10 month pre service training program for women teachers was offered by the education campuses of TU while the SERDP conducted a 10 months in-service training program for primary teachers in its teacher training center located in the far west of the country.

The curricula as reviewed by the planned document were varied where the contents and modalities varied with philosophy of the projects and were determined in isolation. The MOECs 150 hours training provided the mainstream in-service primary teacher training. According to this document the project run short trainings were effective but studies to substantiate their impact on students learning achievements were not available. The annual target of the 150 hours training was far below the set targets. The existing institutional capacity of teacher training was under utilized as in-service training programs operated through ministerial agencies had only limited institutional capacity. The planned document stated that the decreasing amount of financial resources allocated to teacher education had a

detrimental effect on the quality and consolidation of training programs. The project run training programs were financed through external assistance. The document has also reviewed a number of reform proposals suggested by various studies and recommended various policy options for the development of primary teacher training.

### **Primary Teacher Training according to National Education Commission (NEC) 1991-92**

The commission, which was set up to suggest appropriate education in the changed political context of the country, reviewed the education system in which teacher training was included as an essential component. The commission strongly expressed its conviction that teacher training upgraded the efficiency of teachers and efficient teachers improved the quality of teachers. Being the inescapable necessity for raising the quality of education, the commission recognized the need that teacher training be made compulsory for all working teachers in the country. According to the report of the commission (1992), there was a large back log of untrained teachers (approximately 61045) which was difficult for the existing teacher training center to meet the challenge to impart required training. The commission also recognized the need for understanding the distinction between teacher education and teacher training. The commission pointed out a number of deficiencies and problems in the system of primary teacher training. Some of these were as follows;

- The practice of providing training to teachers only after they had joined teaching service was defective
- The organizational set up to determine coordinate, direct, evaluate and mobilize various teacher education and training policies and programs was lacking
- The appropriate content and duration of in-service teacher training was not determined.
- Agencies conducting teacher training program did not have adequate contacts with agencies responsible for curriculum development, examination of educational materials, development of educational administration as well as with the schools
- There was little coordination between pre-service and in-service teacher training programs

The commission specifically provided the following recommendations with respect to the primary teacher training

- The training should be made compulsory for all teachers to develop professionalism and provide them with knowledge and skills of teaching
- Training should be made compulsory for joining the teaching service
- Women should be given preference in teacher training programs
- Capacities of all existing institutions including the universities be appropriately used in providing to all teachers as soon as possible
- Teacher training should be decentralized

### **Policy studies carried out under PEDP-TA 1993**

Apart from developing training curricula and materials for primary school teachers, headmasters, supervisors and other personnel in the management of primary education, four policy studies were carried out in 1993 under PEDP-TA 1623 funded through ADB. These studies were based on the review and analysis of relevant documents and literature, observations of programs and interactions with a number of educators, experts and officials

closely involved in the development and implementation of primary teachers' training at different times in the country. A brief review of these studies is presented below.

### **1. Review of policy and experiences and current thinking on primary teachers training (Report no.1)**

This study presented a review of the past training policies and programs covering the periods 1971-81 and 1981-91 separately including current thinking during early 90s. This was basically the reiteration of what has been presented under the forgoing reviews. It also attempted to make a brief review of the issues in primary teacher training at the time of the study. These studies were basically related to planning, quality of training, use of training curriculum, trainer's provision and their training, pre-service training duration of training and administration and organization. The study forwarded a number of recommendations. It suggested the need to prepare a training plan specifying the number of teachers to be trained in addition to setting up NCED and PTTCs as specified in PEDP to facilitate planning, programming and implementation of in-service teacher training and other education personnel. The teacher training curricula should be oriented with new curriculum and text books. Implementation of school physical facilities was recommended to encourage trained teachers to apply training skills. Clarifying the role, functions, staffing and funding arrangements for NCED and PTTCs and other related agencies was also essential for efficient running of the training programs. Finally the recommendations emphasized the need for providing quality of training with focus on enhanced teaching learning at school level.

### **2. An evaluation of primary teacher training initiative during the 1980s (report no.2)**

This study report presented a review of primary teacher training in Nepal starting from the basic teacher training and the mobile normal school to the multiple training systems up to the time of study. It presented detailed review of the primary teacher training program organized and implemented through various agencies and projects. According to the study, the Seti projects short term teacher training was though an innovative and effective training, it was not sufficient to become perfectly trained. However, it was instrumental in providing a basis for the development of 150 hours basic teacher training of MOE. Further the Project's 10 month teacher training developed later as a long term primary teacher training program. Regarding MOE's 150 hours training, the study reported that this training achieved the highest achievement target although it had not significantly changed the behaviors of the teachers. The impact of PEP training was reported as significant towards the improvement of teaching learning situation in primary schools. Similarly, RETT was reported to be in no way inferior to other 150 hours trainings of MOE as there was no evidence to indicate that it was less effective than the face to face alternatives. The recommendations were related mainly with facilitation of training facilities through various modalities except for the need to develop a full-fledged residential teacher training center in each development regions apart from addressing specifically each aspect of training e.g. delivery, management and coordination, quality of training and cost and financing.

### **3. Development of a career structure for the primary education sub-sector (report no.3)**

This study briefly examined and analyzed the current situation of primary teachers at the time of the study. According to which teachers were categorized under four categories based on their qualification. There was no built in ladder for teacher promotion and the system looked somewhat closed for not providing a built in ladder system in terms of academic qualifications beyond the intermediate level. The study in its assessment found that career opportunities and prospects in the primary education sector were poor and concluded that there was an urgent need for an improved primary career structure in an effective national

system for the training and professional development of primary teachers and managers. The study came out in the end with a detailed scheme of general and specific recommendations for the development of an appropriate career structure for the primary education sub-sector in Nepal.

#### **4. Policy options in primary teacher training and career development of primary teachers (report no.4)**

This study was aimed at developing policy options and action plans for implementation. This was primarily based on the first three studies through a synthesis of their major conclusions and recommendations. It also drew on the report of BPEP master plan 1991 and report of NEC 1992. The study reviewed the main features of primary education system and teacher training policies and plans with current thinking on them at the time of study which included the review of policy recommendations of BPEP master plan I and NEC 1992, policy and programs of BPEP and PEDP. It also reviewed contemporary teacher training systems including major pre-service and in-service programs. It then presented major issues in primary teacher training related basically with policy, planning, duration and curricula, quality of entrants and training, coordination, use of training, career development of teachers, women teachers and the role of FOE. It recommended three options for implementing 10 months training course comprising four packages each of 2.5 months duration in addition to other general recommendations. It also recommended for meeting training targets of the 8<sup>th</sup> plan (1992-97). Finally, it concluded with the presentation of action plan for main policy options/programs, scheduling and costing.

#### **Primary Teacher Training Under BPEP Master Plan (1997-2002)**

Like many other previous studies, The Basic and Primary Education Master Plan (1997-2002) has tried to analyze the contemporary context and status of teacher training with a brief review of its development in the past. The essence of this analysis and review was mainly the following:

- The concern to achieve quantitative targets dominated the planning and implementation activities.
- Inadequate professional exercise remained a permanent feature of the process of development.
- Lack of conceptual clarity caused imbalance in the fixation of priority for different training programs.
- Ineffective input and process management plagued both in-service and pre-service programs.
- Financing of the program remained swinging either towards excessive cost effectiveness or excessive cost intensiveness.

The Master Plan identified a number of problems and issues of the contemporary teacher training programs which in fact were related mainly with the problems and issues of the policy, management and coordination, quality, funding and theoretical base of training. The recommendations made for the improvement of teacher training were based primarily on these problems and issues.

#### **Teacher Training Under THE High Level National Education Commission (HLNEC), 1998**

HLNEC, 1998 recognized teacher education and training as essential elements for quality education. The commission expressed concern about the low proportion of trained teachers and identified a number of problems and issues of teacher training which included mainly: unclear policy, lack of private sector participation, low attraction towards training, lack of need based program, no distinction between pre-service and in-service programs, large

number of untrained teachers, less emphasis on practical aspect of training, lack of departmental research and development activities etc. The commission forwarded a number of recommendations in order to address the problems and issues.

### **Training of Primary School Teachers: An Analysis (2002)**

In an occasional paper titled “Training of Primary Teachers: An Analysis and a Proposal”, Shrestha(2002) has tried to critically examine the genesis of problems of primary teacher training with a view to develop a framework for the establishment and operation of a sound teacher training system in the country. In his review he meticulously makes a mention of the lessons learned and lessons forgotten in the context of the major development programs that have been experimented for the development of a viable teacher training system. He also indicated towards the weak theoretical base of the teacher training curricula and concluded his paper with a proposal for the management of training augmented by alternatives.

### **Teacher Training Under the Education for All (EFA) 2004-2009**

The Education for All [2004-2009] core document,2003 clearly recognized that trained and effective teachers were ‘instrumental for ensuring holistic development and high learning achievement of children’ [ MOES,2003: 30].It also prescribed a number of strategies for enhancing quality and relevance of education, the first which was directly related with the training. As specified in the core document, strategies ‘to improve teaching learning’ would be two pronged. While it would include, at one level ,both certificate and recurrent teacher training, at another level, it would also include ‘ resolving issues of deployment, teacher motivation and recruitment of female teachers... in each school” [Ibid”36].

### **Teacher Training under SSR Program 2009-2015**

The School Sector Reform , Core Document,2008 specified major reform initiatives to be implemented in the school education system. It has a section on teacher management and development which categorically prescribed major policy statements and strategies to be adopted for implementing the policy. The training policy has made mandatory provision for a special teacher’s preparation course recognized as an independent professional qualification on top of the minimum academic qualification for entry into the teaching profession. The strategy to implement the policy initiatives has devised for a four-runged teacher career path: beginner, experienced, master, and expert teacher. It also has devised to link this carrier structure with the professional development of the teachers.

## **Section B**

### **Review of Teacher Training Studies Conducted after the Establishment of NCED**

Primary teacher training program took a new direction after the establishment of NCED in 1993 as part of the PEDP implemented in 1992 under ADB funding. A number of studies have been conducted in the area of teacher training after NCED, organized as a center for manpower development and management in the education sector, was in place under the MOE. Some of these studies have been carried out either by NCED itself or commissioned by NCED to some external consultancy firms. Quite a few studies have also been carried out by other relevant agencies. An attempt is made here to present a brief review of major studies carried out in the area of teacher training especially after NCED as an organized center of human resource development and management was set up in the education sector.

**A study of the effect of the training programs by NCED (1996):**

This study was conducted by NCED in 1996 as a component of BME activity of the PEDP of which NCED was set up as part of the ADB funding in 1993. The major objectives of the study were as follows:

- To assess degree of application of skills to professional practice by NCED trainers
- To assess teacher instructional performance based on training skills.
- To differentiate between the instructional practices of NCED trained and untrained teachers.
- To test student capabilities in basic competencies and relate them with instructional practices.

The study was carried out on a sample of 50 schools selected from 10 districts representing development/eco regions of the country. The sample contained 150 teachers- 100 trained and 50 untrained, including some NCED trained DEO, school supervisors and head teachers. The types of tools used were interview schedules, class observation forms and achievement tests. The study reported a number of findings but for the purpose of this review findings related to teacher training only are included in this context. The report stated that trained teachers were concerned more about their instructional preparation together with preparing teaching materials. They were more skilled in reviewing previous knowledge, using grouping techniques and outside classroom environment for instructional purposes, providing appropriate feedback techniques than untrained teachers. In actual classroom delivery, trained teachers were comparatively more equipped in skills such as stating lesson objectives, clarifying new terms and concepts, using variety of teaching methods, management of instructional time in classroom, providing more practice to students, encouraging for more student participation in classroom etc.

The study had a number of recommendations but those related to teacher training only are included here. The major recommendations referred mainly to setting up of regular monitoring system for classroom instruction by trained teachers, taking care of the difficulties faced by teachers in rural classroom settings for designing training programs, arranging school trainings in clusters to ensure that all relevant educational staffs got appropriate training, emphasizing monitoring and evaluation skills for head teacher training in addition to school management and mobilization of local resources.

**Effect of the training program in classroom practice**

This was the title of a study conducted by NCED in 1998. This study was focused more on to monitor the progress made by NCED trained teachers in the improvement of teaching learning situation in the classroom. The main objective of the study was to assess the performance of trained teachers in classroom instruction. As per the purpose of the study, the sample covered 12 districts which included 700 teachers and 49 trainers. Questionnaires and observations forms were used as the tools of the study.

The findings of the study have shown positive effects of training program in classroom teaching practice. A number of findings are presented that appear to suggest this overall finding. For example, almost one third of trained teachers had prepared annual plans as against only 2/5<sup>th</sup> of the untrained teachers. Trained teachers mostly used group methods of teaching and also used outside environment for motivating students to improve learning. About a third of the teachers were also using locally made teaching materials. However, the trained teachers were found to use mostly theoretical questions to evaluate students learning, although a few teachers had also used observation and homework as effective evaluating techniques. The HTs also found the trained teachers supportive and assisting in solving

academic problems in school. The major factors perceived as problems for using training skills in classroom practice included mainly large class size, low standard of the training package, inadequate time and low standard of the trainees.

The study recommended the need for an inbuilt follow up mechanism in the training program. To facilitate this system the need for developing a follow package apart from conducting training on follow up skills by NCED was also realized especially for school supervisors and DEOs. In addition, the need to conduct periodic impact studies of training program on classroom practice was also suggested by the study.

### **Teacher Management Information System (A Study of 35 Districts)**

This Study was conducted by NCED in 1998. It dealt with the management of teacher training programs through the data of 35 districts covered by NCED for teacher training purposes through its 9 PTTCs. The main purpose of the TMIS was to establish a system of information for policy makers and planners to make right decisions about teacher training. The specific objectives included mainly to collect district wise data of teachers for setting up an information system within NCED and to assist concerned education agencies with updated data on teachers apart from creating a model of EMIS to feed adequate and reliable data in the fields concerned. It used three types of forms to be filled in by HTs, including all teacher related data. Compiling of the teacher related data from the selected districts were collected through DEOs. The teacher related summarized data was compiled by NCED to prepare a master information sheet of teachers of selected districts. Based on the indicators, a computerized model of data based program was developed. The analyzed data was reported in terms of listings of teachers segregated by gender, service status, qualification, age etc juxtaposed across the type of training received.

The study reported the following conclusions by way of findings:

- The proportion of female teachers was 19% in the teachers' cadre.
- About 19% teachers completed the first package, 17% of the first package completers had completed the second package, and 39% of the second package completers also had completed training in the third package while none of the districts had teachers completing the 10 month training course.
- The study also indicted a large number of teachers who had crossed 50 years of age.
- Similarly, there were many teachers who had teaching experience of more than 20 years.
- Majority of untrained teachers fell in the age groups 21-30 years (34%) and 31-40 years (40%).
- About 57% of the teachers were untrained.

Finally, the study indicated that the effort of training teachers was not consistently heading towards achieving the target in time. It also raised questions regarding the utility of providing training to teachers who were more advanced in age vis-à-vis the training policy which favored the selection of teachers for training on the basis of seniority.

### **Teacher training and its implications in classroom practices: a comparative study of the public and private schools**

This study was conducted by CERID in 1998. This was carried out in view of the need to compare public and private primary schools in terms of teacher training with particular reference to curricula, instructional materials and text books used for primary grades. The main intent of the study was to examine the effectiveness of the teacher training in the primary school classrooms of the public and private schools of Kathmandu valley. In specific terms the study attempted to find out different types of trainings received by teachers and examine its use in classroom practice. It also tried to examine different training materials used as part of teaching the curricular materials in the classroom.

The study was conducted in 3 districts of Kathmandu valley in 20 schools (10 private and 10 public). The major study tools comprised schools survey forms, interview and class observation forms. In addition analysis of documents was also carried out to draw relevant information.

The study reported that a large number (about 58 percent) of teachers in public schools compared to only about 6 percent teachers in private schools were trained. However, most of the trained public school teachers were not using the teaching skills learned in training. In contrast about 40 percent private school teachers were using question answers, discussions, demonstrations and problem solving methods while teaching in the classroom. Teaching materials were provided to teachers in both types of schools. Teachers in both types of schools have not used local materials for teaching. There were more teacher used materials in private schools compared to public schools. Majority of private school teachers had qualifications higher than required for the primary level compared to public schools where majority of teachers had the minimum required qualification of SLC only. Majority public school teachers used lecture methods.

The study recommended that the private school teachers should also be availed of the training facilities provided by MOE. The PTTCs should also be mobilized to conduct pre-service trainings. It also suggested the need to mobilize private sector to organize government training packages. Short term trainings organized during vacations were suggested especially for teachers of private schools.

### **Monitoring the performance of trained teachers**

This study was conducted by NCED in 1999. The major objective of the study was to identify the strength brought by the teacher training program in instructional improvement of the schools. It also aimed at identifying problems regarding the utilization of training skills in classroom practice. The study sample included 322 teachers and HTs trained in the first package and selected from 281 schools of the nine PTTC districts. Interview form and class observation forms were the main tools for this monitoring study.

The study report stated that majority of HTs were satisfied with the performance of trained teachers. The five basic qualities identified among the trained teachers were: use of proper teaching methods, construction and use of local teaching materials, use of curriculum and text book in teaching, use of improved assessment techniques and positive attitude towards teaching. The teachers were found knowledgeable about the pedagogy learned in the training program. However, their performance in applying it in practice was not up to the expected level. This monitoring study recommended the need of a detailed study regarding the impact of training in the instructional practice of schools. Similarly, a built in monitoring mechanism of NCED training program including PTTCs also needs to be implemented as a formative basis of training on the long term.

### **Training of teachers: Factors contributing to the effectiveness of training in classroom practice**

The study was conducted by NCED in 2000. It was aimed at finding the effects of training and identifying factors contributing to the effectiveness of training in the classroom. The sample of the study included 8 master trainers, 6 trainers and 29 Math teachers for observation of classroom and interaction. The study used discussion and interview guidelines, observation forms and test score records for analysis.

The study found that teachers were using some of the skills learnt during training such as asking questions, providing feedback and opportunity to students to express themselves. Teachers were skilled in motivating learners using black board effectively and assessing learners' understanding. On the contrary the study also showed that most of the teachers did

not plan their lessons nor did they attempt to help slow learners. The major factors for non-transfer of training included inadequate physical facilities to promote group work and display of materials, lack of motivation and competence among teachers, cascade model of training in which much of the rigor of training is lost in between the steps bringing little effect to the classroom level. Similarly, factors positively affecting transfer included mainly more practice time for skills, positive attitude towards teaching, dissemination of learned skills to the peer group and provision of evaluating skills.

The study recommended the need for the provision of sufficient time for practicing skills in training sessions, paying attention to develop positive attitude among trainees, equip the training with adequate resource, ensure monitoring and technical backstopping and provide trainees with sharing sessions with the peers.

### **Teacher training follow up: A study report**

This study was conducted by NCED in 2000 with the intent that application of learned skills should be measured at the work place rather than depending solely upon end up training test. Therefore, objective of the study included identification of trained teachers' personal behavior in classroom practices and level of their skills in preparation and use of teaching methods and student evaluation.

The study was carried out on a sample of 380 trained teachers. A structured class observation form and open questionnaire was used by senior instructors and trainers of PTTCs and training officers of RED and NCED for data collection.

The findings showed that most of the trained teachers possessed appropriate personal qualities and sufficient content knowledge and were able to involve students in teaching learning satisfactorily using different methods. They could also make education materials and evaluation techniques satisfactorily. However, the trained teachers were not competent in classroom management, construction and display of basic and creative teaching materials. They were also weak in the use of questioning skills and conduct students centered interaction, demonstration, problem solving and other practical activities in the classroom. This study did not provide any recommendations.

### **Effectiveness of primary school head teachers training**

This study was conducted by METCON and sponsored by NCED in 2002. The main purpose of the study was to investigate the effectiveness of training program in terms of knowledge and skills and its impact on school management and functioning. The study aimed to establish a base for improving the program for capacity building of primary school HTs.

The study was conducted on a small sample of 10 schools. It included 50 HTs and 100 teachers in addition to other local level respondents. It used interview, FGDs and observation check list as the tool of study.

According to the study findings classroom activities were based on participatory approach but not practiced adequately. Training packages were perceived relevant. Modality of training was considered desirable. Most of the trainers were under qualified academically. The impact of the HTs training on academic affairs and physical environment of the school was moderate. However, impact on supervision and coordination of school activities was low. In general, impact of the training appeared to be moderate in most aspects of the school activities. It was also reported that lack of conducive environment in most schools was the major cause for low impact.

The study recommended the need for revision of training contents. Various training packages developed for HTs should be integrated in one package. Adequate educational materials should be made available to schools. Training should be conducted in workshop style.

### **Follow up study of teacher training program**

This study was conducted by ICS Education Campus and sponsored by NCED in 2002. This study was conducted basically to know the effects of classroom based follow up on the transfer of training skills in actual teaching. The study used a combination of document analysis, classroom teaching observation, interview with HTs, teachers, NCED officials and FGDs with students and parents. A total of 8 districts representing ecological and development regions were selected. Number of schools and teachers by ecological and developmental regions was 28 and 40 from mountains, 72 and 105 from hills and 78 and 141 respectively from the terai.

The study reported that NCED manpower highly benefitted as the concerned staffs remained involved in major activities of the research work on the follow up of teacher training. The delivery of training was not uniform as the first and the second packages were delivered more competently than the third and fourth packages. Evaluation techniques followed by planning and preparation of instructional materials were the skills which the teachers found more applicable in classroom. The most used teaching methods were question answer, lecture and demonstration. Teaching of English, Nepali and Math as viewed by majority of students was good compared to other subjects. Feedback of teachers was highly needed in areas such as preparation and use of teaching aids, knowledge of content and class room delivery. The training of trainers had little coverage of the contents of the training which resulted in low acquisition of training skills. Improvement of teaching learning activities was observed as a result of immediate feedback given to the teachers under the applied follow up strategies. Absence of follow up support mechanism negated the achievement of the expected teaching behavior in classroom.

The study had a number of recommendations. The major recommendations included the following.

- NCED training staffs need orientation and training in follow up skills to facilitate transfer of the skills to PTTC instructors.
- Follow up support to teachers should emphasize more on preparation and use of instructional aides, knowledge of contents and classroom delivery.
- Follow up classroom teaching should be immediately conducted after the training.
- There is a need to delegate teacher follow up and supervision responsibility to schools.
- A long term strategy should be designed within the training program to ensure timely support to teachers
- To bring forth the expected changes in teachers' three approaches need to be developed simultaneously.
  - Inspectorial approach to track teachers' performance
  - Career path approach to encourage teachers to be self assertive
  - Professional approach to enable teachers to undertake collaborative action research

### **Teacher supervision and support services for primary schools in Nepal: A diagnostic study conducted in collaboration with IIEP**

CERID conducted this study in 2002 to formulate innovative ways and means of providing professional support for teachers to promote quality of basic education. The main purpose of the study was to find out the avenues for strengthening supervision and support for teachers in order to improve the quality of education. The specific objectives were to diagnose the

existing system of supervision and to identify sensible strategies for reorganization and strengthening teachers support and supervision.

This study used a series of interaction with DEOs and HTs to discuss various problems of teacher supervision apart from field based case studies from 3 districts i.e. Chitwan, Banke and Jumla.

The study has outlined a number of findings.

- A wide gap was identified in conceptualization and practice of supervision system
- School supervisors were not able to discharge their duties competently
- The main issue of supervision relates to the lack of logistic support to supervisors
- There was also a need to scrutinize the current conception of supervision and practices.
- The deterioration of functioning of primary schools was related with the weakening professional supervision support

The major recommendations of the study were as follows;

- The supervisory task need to be categorized in two parts- monitoring task and instructional support task
- DEOs/SSs/RPs/HTs and SMCs should be provided training on monitoring and school support
- The RPs involvement in training activities rather than supervision should be revisited
- The responsibilities to develop effective supervision mechanism should be given to school level
- Improved mechanism to recruit qualified supervisors and RPs should be made

### **Effectiveness study of teacher training**

This study was conducted by CRED in 2002 under the sponsorship of NCED. The main purpose of the study was to investigate the extent of effectiveness of teacher training and identify barriers to the transfer of training in classroom. This study covered 3 districts viz Jhapa, Tanahun and Darchula. Teachers, HTs, trainers, RPs and students were the respondents of the study.

The major findings of this study were as follows;

- The preparation for instruction was made by only a few teachers (about one third) while 28 percent used commercially used materials. Though physical facilities of the schools were good overall sitting and classroom management was poor.
- Interaction between students and teachers was observed in most classrooms although revision of lesson and encouragement to students' participation was discouraging.
- Majority of students were satisfied with classroom delivery by teachers.
- Transfer of training was not visible
- Majority of teachers perceived training package useful
- The time was insufficient for practice in training delivery
- There was also a lack of equipments and facilitation during training.

The study has suggested the need for more practical lessons and use of instructional materials in training package. Provision for interactive techniques of teaching, group work and practical exercise based training. The training packages should be revised including self learning materials.

### **Effective class room teaching learning: Transfer of training skills in the classroom delivery**

This study was conducted by CERID in 2003 under the formative research project funded by NORAD. It was focused on examining delivery of training module to both trainers and teachers in addition to the level of delivery by trained teachers in classroom. It also examined the factors that affected transfer of training in classroom delivery. The study findings were based on a sample of 20 schools from 6 districts and the information was analyzed qualitatively.

The study examined different layers of training in the cascade model and found that there were different layers of performance of trainers so that quality of training could not be maintained uniformly. The training was also affected by lack of training materials. Activities carried out primarily and consistently would promote better transfer of training skills.

Discussion, demonstration and practice were such activities. The major deterrent factors for transfer on the part of trained teachers were the following.

- Skepticism for newer techniques/methods
- Lack of competency on subject matter
- Inadequate practice of skills
- Attitude to serve

Similarly, factors identified as supportive and promoting to transfer were the following.

- Sufficient opportunity to discuss, demonstrate and practice
- Positive attitude towards training
- Proper and consistent practice of the skills
- Up to date and useful curriculum materials
- Heightened motivation of the learner

Main suggestions of the study included the following.

- Provide focused training covering basic essential skills emphasizing discussion, demonstration and practice
- Provide required materials as part of the training package
- Adopt appropriate evaluation techniques periodically
- Provide training to the trainers to update their skills
- Monitor the use of training skills at classroom level

### **Monitoring of teacher training activities (A report)**

This study was conducted by NCED in 2004 to take timely corrective actions in the input process and outcome mechanism of teacher training programs in training centers. It was a study carried out by a central level group of monitors based on observations of training sessions of pre-service and in-service trainings.

By way of suggesting the findings of the monitoring, the growth discerned in various aspects in the conduct of training in the training centers was reported in percentages. However, these findings could also be briefly presented in qualitative terms as follows.

- Majority of training centers faced problems of inadequacy of physical facilities and essential instructional materials.
- Most of the trainers were well prepared and handled the classes as instructed by training guide
- Senior teachers participating in the program remained inactive in the training

- Instructional materials including trainers resource materials were inadequate in the training centers
- The regular attendance of many participants was not satisfactory

The recommendations were very general in nature and related with paying attention to ensure physical facilities, prepare subject wise trainers, prepare no and low cost materials, provide minimum set of materials to training centers and ensuring involvement of REDs, DEOs for close monitoring of training centers.

### **Monitoring of training program under NCED**

This study was conducted by NCED in 2006 as part of the monitoring of the training program. The specific objectives of the study were;

- Collect comprehensive information for providing feed back to managers and planners
- Analyzing factors contributing good practice in teacher training
- Indicating ways to improve training

This study covered a sample of 1136 respondents. It adopted both qualitative and quantitative approach. The primary data was collected through interview and discussion with trainees and trainers at the training centers. Discussion with DEOs and other key informants was conducted for other relevant information besides observation of the training environment. The monitoring has reported inadequate and inappropriate physical facilities and instructional materials in the training centers. Trainers used education approach rather than training approach. The training environment was affected by weak management of instructional materials. About 50 percent of the trainers were not fully prepared to deliver training sessions. Only one third were prepared with required with required materials. The training was adversely affected by shortage of resource materials, library facilities and modern training methodologies.

Monitoring of the distance mode training delivery showed self learning materials not matching with level of learners. They were relevant with primary education development. The radio broadcasting was inadequate. However, the regular trainees received good support from resource teachers during the contact session. The coordination between DEO, ETC and NCED in program orientation, material distribution and monitoring was weak. The monitoring suggested the need for effective utilization of existing physical facilities of the training centers. Comprehensive trainers development scheme was suggested to prepare trainers equipped with modern techniques and skills of training. Monitoring should be the integral part of training programs. The delivery distance mode using radio broadcast should use simple language and maintain linkage between self learning materials and radio broadcasts. Effective coordination mechanism should be developed between DOE and NCED.

### **A study on the effectiveness of primary teacher training in Nepal**

This study was conducted by Fulbright Consultancy in 2006 under the sponsorship of DOE. The overall objective of the study was to find out the status of transfer of training skills in the classroom and the conditions facilitating transfer. The sample of the study was based on the selection of the trainers from 5 ETCs and trained teachers of 15 public schools. The collection of instruction was made on the basis of class observation of trainers in ETC and teachers in selected schools. The tools for data collection were mainly semi structured questionnaires, observation checklists and FGDs.

The study came out with the findings that the ETC trainers were competent in handling trainees, communicating information and managing classroom environment but weak in using training resources, evaluation techniques. Classroom teaching in training sessions appeared to be more theoretical. Performance of trained teachers was better than untrained teachers. Students were satisfied with trained teachers' performance. Parents SMCs were also happy with them. The teachers preferred face- face to face training compared to distance mode. The study also came with the conclusion that on the whole transfer rate of primary teacher training at classroom level was 50 percent.

The study also came out with a number of recommendations. The major recommendations were the following.

- Teacher training should be integrated with total management of teachers
- Trainers should have experience in primary school teaching and be familiar with school environment
- HTs need to play major role to create conditions promoting transfer of training in the classroom
- Lesson planning be made obligatory to trained teachers

### **Effectiveness study of primary teacher training in Nepal**

The study was conducted in 2006 by NCED. The major purpose of the study was to examine various stages involved in primary teacher training system and document how each of the stages i.e. policy formulation, planning and program development, training delivery, transfer of training skills and teacher support and management and document how each stage was contributing to the overall effectiveness of the training. It used both qualitative and quantitative approach of study. The study covered 20 percent of trained teachers from a sample of 2200 primary teachers. Questionnaires, observation checklist, rating scales were used for data collection besides case studies and FGDs.

The findings of the study were categorized into four different themes. Regarding policy the study identified that there was negligible participation of teacher community in the formulation of training plans, programs and their implementation. The policies relating to teacher training were fragmented. Regarding institutional arrangement and delivery of training the study reported that training system was affected by a number of lacking such as poor physical facilities of training providers, overloaded trainers, poor TMIs, lack of ownership for training among teachers, lack of coordination between training providers, DEOs and schools. Teacher performance was affected by lack of physical facilities in schools, low level of academic qualification of teachers, lack of effective planning time owing to teaching load and lack of awareness on the part of community which preferred physical infrastructure development than teacher training and development. The school environment was not conducive to promote transfer although training curriculum was satisfactory. Majority of trained teachers were weak in almost all instructional aspects of classroom teaching such as planning methods of teaching, preparing materials, classroom control, time management and concluding lessons.

The study came up with the following recommendations;

- Policy statement, implementation and resources to be tied up for effective implementation of training
- Continuous HRD support to be provided to ETCs in terms of staff development
- Overall school environment to be improved for better transfer of training with proper orientation to HTs

- Collaboration among DOE and NCED to be improved for better implementation of training
- Upgrade academic qualification of teachers to augment better results from training.

### **Rapid assessment of in-service primary teacher training organized by NCED**

This study was conducted by Kedar Nath Shrestha in 2006 as local chief technical advisor of teacher education project (TEP) funded by ADB. It was carried out as a rapid assessment of primary teacher training by NCED aiming at addressing one of the objectives of TEP for the support of the NCED activities. The major objective of the study was to collect the perceptions and opinions of trainees on various aspects of training. The assessment was based on a sample of 150 respondents from 7 PTTC districts using a questionnaire. In addition, discussion sessions were held in several classes of trainees.

The study found that almost all of the respondents viewed lesson planning quite useful and showed the tendency to have used it. Majority of them said they had used the skills learned in the training. But the overload of teaching, lack of supervision from the training center had discouraged them to take initiatives to use learned skills in teaching.

The distance mode of teacher training was weak as only 23 percent trainees said they could adequately comprehend the self learning materials on math and English. The attendance and monitoring of contact session was also weak as it was lacking in materials and equipments apart from facilities and trainers lacking in internalizing the significance of training.

The study recommended the need for emphasizing great teaching upto third standard upto a time when requirement of 10 month training on the top of 12<sup>th</sup> standard graduation by teachers is fulfilled. It also emphasized the need for the provision of more training materials. The study recommended for the revision of SLM in distance mode training with emphasis on math and English and provision of longer duration of guided student teaching sessions with the trainers. There was an urgent need to revisit the current in-service teacher training program. It also concluded that the training appeared to have some impact on the teaching behavior of trained teachers as they were found aware of the expectations from primary teachers.

## **Trend**

Though scattered and fragmented, development of teacher training literature indicates a trend in terms of its type and time. Such literature available in the form of commission reports, technical reviews and limited extent of field based research studies can broadly be viewed as:

1. Trends during pre-NESP (before 1971),
2. Trends during NESP (decade of 1970s),
3. Trends during the pre BPEP (decade of 1980s),
4. Trends during BPEP (decade of 1990s), and
5. Trends during EFA and after (decade of 2000s).

Most authentic of this literature could be categorized basically under three major categories

- I. Literature compiled under different reform oriented commission or government documents
- II. Experience/ observation based technical reviews or assessments, and
- III. Field based research studies

The foregoing review has only attempted to briefly present some representative sample of authentic national literature on teacher training. For example the NNEPC, NESP or NEC

reports could be placed under the first category and the IEES study or K. N. Shrestha's review on teacher education could go to the second category. The studies carried out by NCED or other agencies could be roughly put under the third category.

### **Trends during pre-NESP (before 1971)**

One can find plenty of other literature on teacher training that has not been covered by this review. The genesis of modern literature in teacher training in Nepal relates with the beginning of modern thinking in education which was brought about by the political change of 1951 and especially after the establishment of the Normal School and College of Education (COE) in 1956 under US technical and financial assistance. The major source of production of such literature on teacher training in those days was primarily the college of education which produced a number of publications covering various aspects of education including teacher training. However, bearing a few authentic documents, teacher training related literature produced during the COE days represented mostly academic or impressionistic reflections of individual writers and teacher educators of COE.

### **Trends during NESP (decade of 1970s)**

The Decade following the implementation of NESP is important in view of the availability of literature on teacher training in Nepal as it marked the beginning of production of field based literature on teacher training in the country. The major credit for this production should go to the IOE which was the most significant source of such literature in those days. This literature was the product of a number of studies carried out by different educators under the auspices of IOE during 1971-80. For example, Draft Report of the Teacher Training Workshop 1973, Report of the First National Advanced Level Workshop on Continuing Education for Teacher Educators 1978, Development of a Field- oriented Sequence in Primary Teacher Training Program: An Action Research Project by D. M. Karmacharya et.al. 1975, A Case Study of On- the- Spot Teacher Training Program by Ayan B. Shrestha and Chakranand Baidhya 1978, and Teacher Education in the Sixth Five Year Plan by K. N. Shrestha 1979 were some of the examples of other prominent studies that could be included under such literature. Different articles in Education Quarterly, IOE's Journal of Education, also formed a major source of literature on teacher training on those days. In addition, dissertations prepared as part of masters level studies in education by students also comprised important source of literature on teacher training.

### **Trends during the pre BPEP (decade of 1980s)**

The production of literature on teacher training continued during the 80s. In fact it was more prolific with the initiation of a number of project- based programs in teacher training. Apart from project generated literature for internal consumption, a number of technical group assessments, surveys, evaluation or workshop reports constituted the major part of the literature on teacher training. For instance, In- service Training of Primary Teachers in Nepal: Report of National Workshop of IOE/TU 1981, A Study of the Effectiveness of the Extension Centre by K. N. Shrestha and F. M. Malla of IOE/TU 1982, Final Evaluation of RETTP I by Barbara Butterworth et al of USAID 1983, A Diagnostic Study on the Management of Teacher Education Program in Kritipur Campus by D. M. Karmacharya and P. Rajbhandari of Kritipur Campus/TU 1985, Evaluation Study of ERDP 1985, PEP 1986, and EGWN 1986 all by CERID, A Survey of Teacher Education in Nepal by C. N. Aryal et al of TU 1986, Evaluation Study of RETTP II by Williard Shaw et al of USAID 1987, Teacher Training for Better Pupil Achievement: A Workshop Report by CERID 1987, New Directions and Innovations in Teacher Education: A Workshop Report by FOE/TU 1988 are some other prominent examples of the available literature on teacher training during the 80s. Apart from

various evaluation studies of RETTP, Education and Development, a journal published by CERID also constituted major sources of literature on teacher training.

### **Trends during BPEP (decade of 1990s)**

The beginning of the 90's showed a marked change in the thinking on teacher training as a result of the change in the political context of the country. A new trend can be discerned in the production of teacher training literature during the 90's especially after the establishment of NCED as an organized institution of human resource development in the education sector. Even though reform oriented literature such as PEDP appraisal document 1991, report of NEC 1992, BPEP master plan 1997 to 2002, report of HLNEC 1998.

### **Trends during EFA and after (decade of 2000s)**

EFA 2003 and SSR document 2008 were the major training policy setters of this period, the 90's and the decade that followed witnessed the implementation of a number of empirical database studies focusing primarily for finding out the effectiveness of primary teacher training program conducted through NCED. This could be stated so because out of the seventeen studies referred here, nine were carried out directly for finding out training effectiveness whereas six were very close to that probe either through the conduct of follow up activities or through regular monitoring of the training program under reference. The other two studies had also direct implications for the betterment of training effects on the teaching of teachers in the classroom. From this analysis it is evident that apart from intermittent presence of reform oriented commission reports, projects appraisals or technical assessments and planned documents, the production of teacher training literature in Nepal has clearly followed a slow but steadily growing trend of research studies in the past which has grown faster after the establishment of NCED and tended to focus more on the assessment of training effects in terms of improved use of teaching skills in the classroom.

### **International trends: Brief review**

International literature on teacher education/ training is so abundant that it is practically impossible to make a comprehensive review of this literature for a national study of teacher training within a very limited period of time. In such a situation, instead of attempting to make a detailed review of the study-wise literature on teacher training, it might be more fruitful to make a brief overview of the major trends or directions underlying the various studies or investigations on teacher training that have been carried out at the international level. As such, an attempt is made in this section to present a brief overview of the major trends or directions underlying the literature on teacher training that has been developing over the years at the international level.

The debate over the most effective teaching methods and history of teacher training is closely intertwined. Didactic method of teaching consisting of lectures, memorization and testing of student's knowledge retention has been used long before a systematic method of educating teachers was created. While this method was effective in producing many brilliant scholars, it did not take into account different methods of learning. The pedagogy movement was started in the early 16<sup>th</sup> century with the initiation of different educational innovators most notable of whom included Comenius and Rousseau who developed more practical, adaptable and more student perspective based models of teaching. Meanwhile education of teachers became a formalized movement around 1684 when Saint John-Baptiste dela Salle, an educational reformer established what is generally considered the first teacher's educational school in Reims, France. This French concept of an "ecole normale" was to provide a model school to teach standard teaching practices. A similar school for the training of teachers was set up in Berlin, Germany in 1748. The normal schools spread throughout Europe in the 1700s, and in

the United States in the 1800s mainly through the efforts of the education reformers like Horace Mann and James Carter. By the late 19<sup>th</sup> century, the desire to have trained and effective teachers spread far and wide in the western world. During the first half of the 20<sup>th</sup> century, teachers' specialization became a frequent occurrence in schools and higher college or university degree paths for such fields have all diversified the education /training of teachers. (New World Encyclopedia, 2008)

These days, nearly every country in the world has institutions for education and training of teachers. These institutions can be schools entirely devoted to the education and training of teachers or colleges and departments of education of a larger university. In many countries, they are autonomous to run and develop their own curricula while in some other countries such as China the teacher training programs are approved and run by the government. Despite a number of variations depending on numerous sociological factors, most countries follow more or less similar career paths for potential teachers which mainly include the following:

- \*Initial teacher training/education (a preservice course)

- \*Induction (process of providing training/support during the first year or first few years in a school)

- \*Teacher development or continuing professional development (as in service process)

The question of which knowledge, attitudes, behaviors and skills teachers should possess has been the subject of much debate in different societies. However, certain core areas such as the following are often augmented by regional, cultural and societal perspectives.

- Foundational knowledge and skills,

- Content area and methods knowledge, and

- Practice at classrooms teaching or at some other form of educational practice (Encyclopedia of Education, 2008)

Teacher training/education practices have been influenced by the varying perceptions of the expected roles of teachers prevalent in different societies. Calderhead and Shorrock (1997) observed that these perceptions are the influential factors on how the teachers are prepared and how their professional development is promoted. For instance, teachers have been likened to artists when teaching is referred to as an art rather than a science. This idea was first presented in 1891 by William James in his book 'Talks to Teachers in Psychology'. When teaching is thought of as an art, little is done to promote the professional development of teachers, as those who believe that teaching is an art also tended to believe that teachers are 'born' with a special gift as opposed to prepared through systematic training and that their development as teachers is 'natural'.

One of the prevalent teacher training practices has been influenced by the perception of teacher as a worker. Hoyle (1995) observed that conception of teacher as a worker has been instrumental in the development of teacher education in the parochial sense of simply as a training to impart certain specific pedagogical skills that are required to conduct instruction effectively at the classroom level. In many countries, where teaching is not accorded a status of a profession, teachers are considered as mere workers as opposed to recognized professionals. Based on the five criteria to define a profession, Hoyle concluded that, though teaching has advanced tremendously in both aspects of content and pedagogy over the years and has thus acquired most of the characteristics of a profession, it still has to develop a lot in order to fully acquire the full-fledged status of a profession at par with a fully established profession like medicine or law. For instance, in developed countries like UK, USA and France, teaching is considered as a profession whereas in countries like Venezuela, Paraguay, Pakistan, teachers have no autonomy as the role of teachers is generally determined by principals or other administrators and teachers' organizations are run like trade unions (Villegas-Reimers, 2003).

Notions like discovery learning and heuristic teaching have emerged in the later half of the 20<sup>th</sup> century as ways to reduce oppression of didactic, heavy handed, and knowledge centered teaching. Govin (1990 as cited in KU, 2009) has argued that 'heuristic' is a teaching method encouraging student to discover for himself/herself. Teaching, according to Govin is directed from interest to knowledge, from little understanding to more, from facts to interpretations and from thought to thoughtful action.

Critical pedagogy that has emerged as a critical theory of education over the last decades has also gradually gained ground in the academic circles of contemporary education. Mc Laren (1994) tried to apply critical pedagogy to examine schools in their historical context as well as in the existing social and political fabrics that characterizes the dominant society.

According to Mc Laren critical pedagogy posed a variety of counter logics to the positivist, ahistorical and depoliticized analysis used by both liberal and conservative critics of the contemporary schooling. This analysis could be made easily visible in the context of the training programs carried out through the contemporary institutions of education. Therefore, teacher educators following this critical tradition believe in egalitarian principle and tend to argue that the contemporary mainstream schooling supports an inherently unjust bias resulting in the transmission and reproduction of the dominant status quo culture.

Much of the contemporary teacher education/training practices are influenced by John Dewey's pragmatism which is grounded in everyday life practices and the desire to use experience and creative enquiry to construct a life worth living. Most of the buzz-words used in his theory of education such as 'activity based learning', 'learner directed education', 'need based education', 'reflective teaching' or 'appreciative enquiry' become really meaningful in the context of his interpretation of the philosophy of education which attempted to observe vital links between democracy and education (Dewey, 1963).

Research literature on teacher training/education has witnessed a gradual shift from teacher training to teacher education followed by a shift from learning separately to learning together in which practicing teachers are jointly responsible for their work in classrooms and where their wisdom and experience are perceived as the professional resources. Smyle and Conyers (1991) argued that this conception bears important implication for how schools are organized as places for teachers to learn as well as to teach. These institutions as professional development sites offer teachers-both prospective and practicing- and teacher educators the opportunity to exchange pedagogical knowledge and ideas. As Leonard and Leonard (2003) have also suggested, student performance could be fully realized only when teachers routinely function as teams and abandon their traditional norms of isolationism and individualism (KU, 2009).

After reviewing the teacher preparation programs existing in most western *European* countries, Vonk (1995) concluded that there existed two models of teacher education and development. The first could be identified as teacher professionalism model which is based on the principle of mastering the academic or subject knowledge and professional competence. The other model identified as the professional growth model assumes that if the teachers have greater self understanding, are more reflective, more sensitive, more emphatic, and more fully self actualized, they would inevitably be better teachers. Ingvarson (1998) compared teacher professionalism under traditional system of professional development where the employers have not only control over the system but they also establish the goals of the program with the standard base system where the professional bodies have control when deciding on goals and where opportunities are designed based on needs identified by the teachers in their daily activities (Villegas-Reimers, 2003).

The importance of the role of teacher in the development of education has been highlighted in recent years. This is considered important because teachers are not only objects in the

reforms or development initiatives, they can also act as the change agents when education/training of teachers could be directed at the development of the system. This shift has been so dramatic that many have preferred to it as a new image of teacher learning, a new model of teacher education and even a new paradigm of professional development (Cochran-Smith and Lyle 2001, Walling and Lewis,2000). This perspective is in a way new to teaching as for years the available form of professional development of teachers was only staff development or inservice training. Only in the past few years, the professional development of teachers has been considered a long term process that includes regular opportunities and experiences planned systematically to promote growth and development of the profession. Finally to conclude this section of international literature on teacher education/training, it could be stated that the importance accorded to the professional development of teachers has been found well substantiated with conclusive evidence in favour of satisfactory learning achievements on the part of students. A number of studies have reported that the more professional knowledge teachers have, the higher the level of student achievement. The studies carried out by National Commission on Teacher Training and America's Future( 1996, 1997);Falk (2001); Educational Testing Service(1998); Grosso de Leon(2001); Guzman(1995); Mc Ginn and Borden (1995),and Tatto(1999) are some of the prominent instances worth mentioning in this context (Villegas-Reimers,2003).

## Gap

The above mentioned review has indicated that there is no dearth of literature on teacher training in Nepal. Most of this literature is available in the form of educational reform oriented documents or technical assessment and review or general surveys by experts. The other category is comprised of research or study- based literature. The studies carried out by NCED, DOE or any research institution like CERID may be put under this category. By nature, the reform oriented documents or technical assortments present basically in the form of review reports although their emphasis rests on their prescriptions to implement reforms or suggestive measures to rectify the demerits. As such the available prominent literature on teacher training that has been covered in this review is not seen any different from this perspective. Apart from a few empirical studies, most of the reviews covered under section A- starting from the early 1950s to the present -have been based mainly on both past and present experiences on teacher training carried out with specific purpose that provided basis for implementing the designated reform. On the contrary, the review covered under section B included research studies carried out basically to find out current status or situation on teacher training in the country. Most of the literature in section A consists of papers, articles, or chapters of a book or a report and expert assessments, plan documents or commission reports based on the reviews of past and present experiences and documents. Therefore, the gaps analysis is based mainly on reviews of studies covered under section B above.

Analysis of the literature review showed that majority of studies under section B focused mainly on finding out i] important measures/features of effective training ii] use of training skills in actual teaching, and iii] problems hindering effective transfer of training skills. Studies investigating into the effectiveness of training have counted on segregated skills such as planning for instruction with framing of objectives and preparation of teaching materials ,reviewing of previous knowledge, raising student motivation, using grouping techniques, classroom management, clarifying concepts, managing instructional time, encouraging student participation, providing feedback etc. Effectiveness of training has also been considered in relation to acquisition of basic teaching qualities by trained teachers e.g. use of

proper teaching methods, using curricula and text books appropriately, using improved techniques of assessment and positive attitude towards teaching.

Using training skills in classroom teaching has also been viewed in a fragmented perspective. For instance, some of these studies found trained teachers equipped in skills such as reviewing previous knowledge, framing instructional objectives, using grouping technique etc. These studies have clearly shown trained teachers better than the untrained in their classroom performance. However, the aggregated behavior of trained teachers as the effect of the segregated skills has not been duly investigated. Some studies have attempted to identify factors promoting transfer although transfer of training remained less visible in many cases despite novice efforts to report 50% transfer on ad hoc basis only.

Major findings of these studies relate with general skilled teaching behaviors of teachers which appeared to be relatively reasonable. However the findings have no authentic and objective basis of data as they are based simply on the observation of the teaching behaviors of teachers adopting mostly a purposive sampling with narrow coverage. As methods and technique of data collection, these studies have mostly used interview schedules and observation forms although a variety of tools\techniques such as FGDs ,case studies, class tests have also been used sporadically. Despite using methods or techniques of scientific research, these studies in general lacked in the quality and precision expected from this type of work. Moreover, recommendations of the studies sometimes have gone beyond the scope of the study.

The analysis has showed that majority of the studies have their focus on the assessment of training effectiveness in terms of effective teaching skills and qualities of trained teachers which indicated towards teacher development. However, there are few studies which indicated improvement in the quality of instruction in classroom or in instructional environments in schools. On the other hand, prevalence of absenteeism among trainers and trainees during the conduct of training obviously indicated towards low effectiveness of training.

Despite numerous studies carried out in the area of effectiveness of primary teacher training, not a single fundamental study has been conducted to investigate into the behavior patterns of trained and untrained teachers and to find out the socio -economic or environmental factors that have profound influence on their teaching behavior. The research has been mostly project driven and guided by commercial motives. The salient features of the simplistic method adopted on all types of these studies can be outlined as follows:

- sample happens to be very small to ease data collection
- representation of respondents is made on geographical basis
- data collection mostly constitutes opinion survey of the respondents which may include teachers, educational managers, community leaders or sometimes even students
- the data is tabulated and analyzed on the basis of simple frequency counts or percentages.

Almost all of these studies have been carried out in a ritualistic fashion as if they were commissioned simply to comply with the program target. They have contributed very little in the fundamental knowledge on the learning behavior of students or teaching behaviors of teachers. They also have contributed very little toward theory building on teacher training. To conclude the section, the major gaps of the studies can be mentioned as follows:

- the studies have been carried out mostly by commercial motives and do not constitute fundamental studies to add significantly to the knowledge base
- the studies are not comprehensive to include important aspects of teacher training
- they lack in both theory and practice based significant research
- they have not paid attention to the actual behavior patterns of teachers
- these studies have in general not covered the environment under which the trained teachers have to work in schools

- above all, none of these studies examined teacher training in the perspective of its impact on the various aspects such as access, equity, efficiency etc of education system as a whole

### **Significance of the present study**

The foregoing review indicates that despite an abundance of literature on teacher training, there has been a lack of research studies carried out basically in primary teacher training. Although work has already been in place especially after the establishment of NCED, there is little room to be complacent in this area. A number of studies have been carried out in teacher training by NCED or other research institutions. However these studies have a number of shortcomings as mentioned above. Most of the studies have been conducted as a mini-research and they have not been comprehensive to address significant problems of teacher training.

Indeed, the conduct of studies with a focus on effectiveness of training is a welcome initiative, but many of them have been carried out in a piece meal manner. None of them have gone beyond the periphery of teacher training. In other words, the problem with all the studies is that very few of them attempted to investigate into the impact of training on the overall quality of teaching learning in the classroom. Needless to say, none of them have ever attempted to investigate how training has been impacting on the overall system of education. The need for teacher training can be established only if it creates a desirable impact on the teaching learning of schools and ultimately on the overall system of education.

Universalization of primary education of good quality has been recognized globally.

Therefore, significance of primary teacher training can be established only if it contributes significantly towards the development of primary education. A number of issues such as access, equity, quality, efficiency, teacher development and overall school development has been raised in recent years in the context of primary education development in the country.

Research studies have also been carried out to improve the effectiveness of teacher training but none of the studies have aimed at investigating into the impact of training on these areas.

The need for such a study has been long felt. Therefore the conduct of this study which attempts to investigate into the contributions of teaching training on the development of primary education comprising aspects like access, equity, quality etc is obviously a significant effort in the area of primary teacher training of Nepal.

## CHAPTER III: STUDY METHODOLOGY AND INSTRUMENTATION

### Overview of study approach

Methodological approach adopted in this study was a blending of quantitative analysis and qualitative inquiries. Eleven sets of tools were used in this study. They were (a) School information forms (b) Student information forms (c) Teacher information forms (d) Teacher interview questionnaire (e) Head-teacher interview questionnaire (f) Focus group discussion (FGD) guiding questions (g) FGD notes (h) Observation instrument (i) School case study guidelines (j) School report summary forms, and (k) Achievement tests for Grade III core subjects (English, Nepali, Math, Social Studies) and Grade V core subjects (English, Nepali, Math, Social Studies), and Score sheet for test score records. Apart from this, the field researchers prepared 15 case studies of the teachers and the schools as well, following the school case study guidelines.

Corresponding to the study scope and research questions a blending of quantitative information and qualitative inquiry was adopted for the analysis and interpretation of the study outputs before arriving at findings, conclusions and recommendations. All research questions were grouped into six themes and data collection tools were prepared and tested before fielding of the study in the sample districts and schools. Contribution of teacher training towards the development of primary education was assessed in terms of quality, access, equity, efficiency, teacher development and overall school development. Thematic discussions of findings were guided by the empirical evidences supported by the facts and interpreted with reference to the stakeholders' perspectives as reflected by qualitative inquiries and case studies.

### Selection of sample districts and number of schools

Districts were selected in consultation and with the help of NCED whereas schools were selected with the help of ETC focal persons. In the process of sampling, attention was given to geographical-regional representation of districts and schools and of school types and size where the required number of trained teachers and students would presumably be available for providing input in the form of quantitative data and qualitative information as envisaged by the design of the study. Three schools from each of the nine ETC 'A' districts plus three schools from Jumla of Karnali zone were included in the first set (set A) of sample.

The second set (set B) of sample included 15 schools for in-depth study and school cases from 15 non-ETC districts. School selection was finalized with the help of ETCs as the ETC focal persons were included in this study to facilitate and to help conduct field study for both sets of schools in all selected districts.

Table 1: Selection of sample districts and number of schools

<u>First set</u> (3 schools from each of the 9 ETC 'A' district and Jumla i.e. $10 \times 3 = 30$ schools):	<u>Second set</u> (15 schools of other 15 non-ETC districts i. e. $15 \times 1 = 15$ schools for school case study):
Kabhre	Panchthar      Siraha
Surkhet	Dhading      Makawanpur
Bhojpur	Baglung      Parbat
Sunsari	Pyuthan      Kapilbastu
Doti	Bardiya      Dailekh
Bara	Rasuwa      Lalitpur
Tanahu	Bhaktapur      Dolakha
Dhanusha	Mustang
Rupandehi	
Jumla	

## Study scope and working matrix

*(Reviewed and approved by stakeholders workshop)*

**Table 2: Study scope and working matrix**

Research Question 1: What is the empirical evidence of the periodic changes (improvement) in overall student's achievement?

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Quality	<ul style="list-style-type: none"> <li>• Students' learning achievement</li> </ul>	<ul style="list-style-type: none"> <li>• Sample of students from grade 3 and 5 from the sampled schools</li> <li>• Researcher Designed Tests</li> <li>• School Records</li> <li>• Achievement tests for Math, English, Social Studies and Nepali of grade 3 and 5</li> </ul>	<ul style="list-style-type: none"> <li>• 30 Schools from 10 districts (3 schools of three different types i.e., primary, primary with lower secondary, primary with secondary</li> <li>• School selection process</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Standard Deviation</li> <li>• Mean, Median (against national scenario)</li> </ul>	<ul style="list-style-type: none"> <li>• Comparison of students' scores against the researcher designed tests</li> <li>• Correlation with teachers' score obtained in teacher training</li> <li>• Triangulation with the information obtained from FGD and Key informants interview against the quantitative data</li> </ul>

**Research Question 2: What is the empirical evidence of the periodic changes (improvement) in educational wastage?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Efficiency	<ul style="list-style-type: none"> <li>• GER/NER of respective schools</li> <li>• Drop-out, promotion and repetition rates in grade 1,3 &amp; 5</li> </ul>	<ul style="list-style-type: none"> <li>• School register/ records</li> <li>• Primary and Secondary data</li> <li>• Document study and school cases</li> <li>• SIP study</li> <li>• Flash Reports</li> </ul>	<ul style="list-style-type: none"> <li>• 30 Schools from 10 districts</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis</li> <li>• Standard Deviation</li> <li>• Mean, Median (against national scenario)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis from 3 to 5 years data</li> </ul>

**Research Question 3: What is the empirical evidence of the periodic changes (improvement) in access of different groups, including marginalized community to schooling?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Access Equity	<ul style="list-style-type: none"> <li>• Enrollment Indicators</li> <li>• GPI</li> <li>• Sex and Caste wise Enrollment Details</li> </ul>	<ul style="list-style-type: none"> <li>• School register/ records</li> <li>• Flash Reports</li> </ul>	<ul style="list-style-type: none"> <li>• 30 Schools from 10 districts</li> <li>• Case Studies from 15 schools</li> </ul>	<ul style="list-style-type: none"> <li>• Trend Analysis</li> <li>• Standard Deviation</li> <li>• Mean, Median (against national scenario)</li> </ul>	<ul style="list-style-type: none"> <li>• Trend analysis from 3 to 5 years data</li> <li>• Triangulation of the data.</li> </ul>

**Research Question 4: What is the empirical evidence of the periodic changes (improvement) in the teachers' overall capacity for teaching delivery and school development?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Teacher development  Overall school development	<ul style="list-style-type: none"> <li>Teacher variables (age, sex, qualification, caste/ethnicity, language, work experience, no. of training taken, work load, service status)</li> <li>School conditions in general (educational and physical)</li> <li>Teacher performance including additional activities in school</li> </ul>	<ul style="list-style-type: none"> <li>Primary Data</li> <li>Secondary Data through NCED and ETC</li> <li>Class Observations</li> <li>Interviews with Teachers, Head teachers, parents, SMC/PTA members and students</li> </ul>	<ul style="list-style-type: none"> <li>An average estimates of 5 teachers per school from 30 schools</li> <li>SMC/PTA members</li> <li>Head teachers of respective schools</li> </ul>	<ul style="list-style-type: none"> <li>Capacity analysis</li> <li>Use of the capacity in the classroom obtained from class observation</li> </ul>	<ul style="list-style-type: none"> <li>Teacher performance assessment form</li> <li>Teacher capacity profile</li> <li>Filled classroom observation form</li> </ul>

**Research Question 5: To what extent has the learning achievement of the trained teachers from the teacher-training program been transferred to the teaching learning performance in the classroom?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Teacher Effectiveness	<ul style="list-style-type: none"> <li>Classroom observation</li> <li>Document Study</li> <li>Case Study</li> </ul>	<ul style="list-style-type: none"> <li>Observations</li> <li>Interviews with students</li> <li>School Records</li> <li>Documents Study</li> <li>Teacher performance assessment form through observation</li> </ul>	<ul style="list-style-type: none"> <li>An average estimates of 5 teachers per school from 30 schools</li> <li>SMC/PTA members</li> <li>Head teachers of respective schools</li> </ul>	<ul style="list-style-type: none"> <li>Case reporting</li> <li>Cross sectional analysis of the information obtained from the observation and the interview reports</li> </ul>	<ul style="list-style-type: none"> <li>Triangulation of the qualitative information against the earlier study reports</li> <li>Assessment of transfer of learning from the training to the workplace</li> </ul>

**Research Question 6: To what extent the teacher training and head-teacher training are related (statistically as well as interpretively) to the improvement in the key indicators of primary education development?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Overall school development	<ul style="list-style-type: none"> <li>• Drop out, promotion and repetition rates</li> <li>• GPI</li> <li>• Enrollment and Retention Rates</li> <li>• Teachers' Motivation</li> </ul>	<ul style="list-style-type: none"> <li>• Key Informants</li> <li>• School Registers</li> <li>• Primary and Secondary data</li> </ul>	<ul style="list-style-type: none"> <li>• 30 schools from 10 districts</li> <li>• An average estimates of 5 teachers per school from 30 schools</li> <li>• Profile of the selected teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Trend Analysis</li> <li>• Progress analysis of the individual school</li> <li>• Individual profile analysis of the trained and untrained teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Case Study</li> <li>• Substantiation of the information obtained from literature review against FGD and other qualitative tools</li> </ul>

**Research Question 7: How have the teacher training programs addressed the ecological, regional and cultural variations across Nepal?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Equity Access Teacher development	<ul style="list-style-type: none"> <li>• Teacher variables (age, sex, academic qualification, caste/ethnicity, language, work experience, no. of training taken, work load, service status)</li> <li>• Representation of teachers from ecological, regional and cultural aspects in the teacher training program</li> </ul>	<ul style="list-style-type: none"> <li>• Secondary</li> <li>• Teacher Profiles</li> <li>• Information obtained from the document analysis</li> </ul>	<ul style="list-style-type: none"> <li>• 30 schools from 10 districts</li> <li>• An average estimates of 5 teachers per school from 30 schools</li> </ul>	<ul style="list-style-type: none"> <li>• Documentation</li> <li>• Fresh information against the documented data and/or information</li> </ul>	<ul style="list-style-type: none"> <li>• 5 years record</li> <li>• Cross sectional information against the document studies</li> </ul>

**Research Question 8: What are the possible latent factors, which may have affected the changes (positive and/or negative) in relation to inquiry under various research questions?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Equity Access Overall school development	<ul style="list-style-type: none"> <li>• Correlations</li> <li>• Factor Relations Identification</li> </ul>	<ul style="list-style-type: none"> <li>• Primary</li> <li>• Secondary</li> <li>• Teachers, Parents, DEOs, RPs, ROs as key informants and from FGD</li> </ul>	<ul style="list-style-type: none"> <li>• 30 schools from 10 districts</li> <li>• An average estimates of 5 teachers per school from 30 schools</li> </ul>	<ul style="list-style-type: none"> <li>• Multivariate analysis</li> <li>• T-test</li> <li>• Principle Component</li> </ul>	<ul style="list-style-type: none"> <li>• Cross checking against the studies done in the past</li> <li>• Case studies against the other sources of primary information/data</li> </ul>

**Research Question 9: What specific strategies and policies are imperative for effective teacher training program in the face of emerging requirement of pedagogical and school management context in Nepal?**

<i>Theme (Construct)</i>	<i>Variables / Evidences</i>	<i>Data sources / Instruments</i>	<i>Sample Size / Process</i>	<i>Methods of Data Analysis</i>	<i>Verifying Indicators</i>
Quality Teacher development  Overall school development	<ul style="list-style-type: none"> <li>• Gap Analysis</li> <li>• Trend Analysis through meta analysis of previous studies</li> </ul>	<ul style="list-style-type: none"> <li>• Primary</li> <li>• Secondary</li> <li>• Various literatures from national and international context</li> <li>• Study findings and conclusions of previous studies of teacher education</li> </ul>	<ul style="list-style-type: none"> <li>• Document Study</li> <li>• Recommendation analysis of the earlier studies</li> </ul>	<ul style="list-style-type: none"> <li>• Recommendations of the earlier studies against the suggestions of the present study</li> </ul>	<ul style="list-style-type: none"> <li>• Policy and practice level verifications</li> </ul>

### Tools and processes used in selected sets of Districts/schools

'Schools' and the 'teachers who received the 10 month's primary teachers training' were the units of research or 'entities' for the purpose of this study. However, student variables and their achievements were accounted for in this connection. Sample schools and teachers therein were selected and finalized with the help of ETC focal persons and the concerned DEOs as the data collection teams were fielded.

Table 3: Tools and processes used in selected districts/schools

Set 'A'	Set 'B'
3 schools from each ETC 'A' district and Jumla (10 x 3 = 30 schools) (ETC district schools)	15 schools of other 15 districts (15 x 1 = 15 schools) (Non-ETC, case study schools)
<ol style="list-style-type: none"> <li>1. School info</li> <li>2. School entity details</li> <li>3. Teacher info</li> <li>4. Student details</li> <li>5. Achievement tests of grades three and grade five completers (sampled) in core subjects: Nepali, English, Maths and Social Studies.</li> <li>6. Teachers' interview</li> <li>7. Head teacher's interview</li> <li>8. Stakeholders' interviews (SMC, PTA, Trainers, DEOs, Supervisors)</li> <li>9. Observation instrument (class and school context)</li> <li>10. Focus group discussions (with teachers, students, SMC, PTA)</li> </ol>	<ol style="list-style-type: none"> <li>1. School info</li> <li>2. School entity details</li> <li>3. Teacher info</li> <li>4. Student details</li> <li>5. Achievement tests of grades three and grade five completers (sampled) in core subjects: Nepali, English, Maths and Social Studies.</li> <li>6. Teachers' interview</li> <li>7. Head teacher's interview</li> <li>8. Stakeholders' interviews (SMC, PTA, Trainers, DEOs, Supervisors)</li> <li>9. Observation instrument (class and school context)</li> <li>10. Focus group discussions (with teachers, students, SMC, PTA)</li> <li>11. School case preparation guidelines. (interpret and summarize all data while writing the school case paper according to the guidelines)</li> </ol>

### Selection and deployment of field researchers

In addition to the core team of experts, field researchers were identified and selected based on their individual profile and readiness for the assignments. ETC focal persons from each ETC 'A' were included as members in the team of field researchers thoroughly trained and deployed for the field work. In addition to orientation and joint training of focal persons and field researchers, support teams from NCED and TITI provided logistic and other information support through out the study as and when needed to carry out the field work. Teams of researchers were then thoroughly oriented and deployed to both set A and B districts/schools (see annexes XIII and XIV for team deployment records).

### Training and orientation of field researchers

Field researchers, including ETC focal persons were given orientation and training on the interpretation and use of the data collection tools, processes and strategies. Individual field researchers were sent for pilot testing of the tools and processes and the output they came up with was shared with them during the orientation before the field work. Expert opinions and

ideas were presented and mutually shared with them and the client, including the core study team designated to analyze and interpret the outputs leading to study report.

### Meetings and workshops

Series of meetings and workshops were held before, during and after the study. Sharing and planning meetings with NCED gave the study team an insight as to what else is to be looked for as contribution of teacher training and how to gather the required data using appropriate tools for collecting and clustering facts as well as stakeholders' perceptions as part of qualitative inquiries. Such meetings and workshops organized periodically gave adequate insights and directions for carrying out the study.

### Field plan and instructions for researchers

Detailed instructions were provided to field researchers to conduct the field research effectively. Additionally, discussions were held with them for clarifications in case of confusions, including examples and non examples of steps and processes in the field districts and schools (see annex... for detailed instructions).

### Rationale for the tools, methods and samples selected

Thus, this study was designed to gather primary data from a total of 2385 key stakeholders as respondents and 132 items as study units/data points (e.g. reports, districts, schools, courses, subjects, grades etc). Multiple sources of data were then be analyzed and blended to arrive at findings, conclusions and recommendations.

As included in the annex, altogether eleven types of instruments were used including for both set A and B schools and districts. Data gathered using those different sets of instruments helped the field researchers and the core team of experts to analyze and interpret the quantitative information and qualitative inquiries collected from multiple sources and for specified purpose according to the design of the study. Tools used for data collection included the following:

Table 4: Rationale for the tools, methods and samples

Methods and tools used	Study sample and key respondents	Rationale
<ul style="list-style-type: none"> <li>• School information forms</li> <li>• Student information forms</li> <li>• Teacher information forms</li> <li>• Teacher interview questionnaire</li> <li>• Head-teacher interview questionnaire</li> <li>• Focus Group Discussion (FGD) guiding questions</li> <li>• Focus Group Discussion (FGD) notes</li> <li>• Observation instrument</li> <li>• School case study</li> </ul>	<ul style="list-style-type: none"> <li>• 28+ reviews of previous studies</li> <li>• 25 districts (set 'A' = 10, set 'B' = 15)</li> <li>• 45 schools</li> <li>• 225 trained teachers/head teachers</li> <li>• 45 SMC members/chairperson</li> <li>• 45 PTA members</li> <li>• 45 training providers</li> <li>• 90 class/school observations of teachers</li> <li>• 135 focus students</li> <li>• Case studies of 15 schools</li> <li>• 4 core subjects of grades 3</li> </ul>	<ul style="list-style-type: none"> <li>• Review and analyze study trends and gaps</li> <li>• Include ETC as well as non- ETC districts</li> <li>• Cover schools of various types and size</li> <li>• At least 5 trained teachers from each school</li> <li>• Chairperson or at least one member of SMC</li> <li>• At least one PTA member from each school</li> <li>• ETC trainers plus RP/AP from each district</li> <li>• At least two classes observed in each school</li> <li>• Behavior observation for</li> </ul>

<p>guidelines</p> <ul style="list-style-type: none"> <li>• School report summary forms</li> <li>• Achievement tests <ul style="list-style-type: none"> <li>○ Grade III core subjects (English, Nepali, Math, Social Studies)</li> <li>○ Grade V core subjects (English, Nepali, Math, Social Studies)</li> <li>○ Score sheet for test score records</li> </ul> </li> </ul>	<p>and 5 for achievement tests (Math, English, Social studies, Nepali)</p> <ul style="list-style-type: none"> <li>• 1800 students' learning achievement assessed through researcher designed achievement tests.</li> </ul>	<p>qualitative inquiry</p> <ul style="list-style-type: none"> <li>• Case narratives of events and anecdotes</li> <li>• Achievement test scores compared with latest scores of students in the core subjects</li> <li>• 5 randomly selected students from grades 3 and 5 completers for 4 subjects; 45 schools of sets A and B x 8 subjects x 5 students per subject.</li> </ul>
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## **CHAPTER IV: DISCUSSION OF THE FINDINGS**

The purpose of this study was to assess the contribution of teacher training programs to primary education development in Nepal. “What contributions have been made by the teacher training programs to the development of primary education in Nepal?” was the key research question that prompted this study. Six themes (quality, access, equity, efficiency, teacher development and overall school development) as areas of possible contribution of teacher training were then derived from the nine subsidiary research questions corresponding to the key research question.

### **Framework for reporting the findings**

In order to present field based findings of this research in a systematic manner, a constructs matrix was developed. The constructs focused on all nine research questions and the corresponding scope of study as given in the ToR. Further, in alignment with the nine research questions, the constructs were designed into six themes in consultation with the client (NCED). The constructs included: quality, access, equity, efficiency, teacher development and overall school development. Essentially, the nine research questions and the scope of study included in the ToR were embedded into these six themes and adequately addressed in the study (see annex XVIII for study scope IDs).

Table 5: Linking scope, research questions and study themes

Study scope ID	Research questions	Quality	Access	Equity	Efficiency	Teacher Development	Overall School Development
# 3, 10, 12	1. What is the empirical evidence of the periodic changes (improvement) in overall student's achievement?	■			■		
# 4, 10, 12	2. What is the empirical evidence of the periodic changes (improvement) in educational wastage?				■		■
# 5, 10, 12	3. What is the empirical evidence of the periodic changes (improvement) in access of different groups (including from marginalized community) to schooling?		■	■			
# 6, 10, 12	4. What is the empirical evidence of the periodic changes (improvement) in the teachers' overall capacity for teaching delivery and school development?					■	■

# 7, 10, 12	5. To what extent has the learning achievement of the trained teachers from the teacher training program been transferred to the teaching learning performance in the classroom?						
# 8, 10, 12	6. To what extent the teacher training and head-teacher training are related (statistically as well as interpretively) to the improvement in the key indicators of primary education development?						
# 9, 10, 12	7. How have the teacher training programs address the ecological, regional and cultural variations across Nepal?						
# 10, 11, 12	8. What are the possible latent factors which may have affected the changes (positive and/or negative) in relation to inquiry under various research questions?						
# 10, 13	9. What specific strategies and policies are imperative for effective teacher training program in the face of emerging requirement of pedagogical and school management context in Nepal?						

# numbers indicate study scope numbers as IDs.

With reference to the reporting framework discussed above, the contributions of teacher training programs to primary education development is discussed under the quality, access, equity, efficiency, teacher development and overall school development themes. Under each theme, supporting literature and instances from previous studies have also been cited wherever appropriate.

## Quality

### Teacher Quality

#### Introduction

There is a general consensus, in the literature, on teacher quality being the most important school related factor influencing student achievement. However, what constitutes teacher quality largely remains a subject consistently under debate. Teacher characteristics are commonly used quality indicators and that these characteristics are assessed against student achievement to measure teacher effectiveness. The common teacher attributes that are seen to have positive impact on learning outcomes include teacher experience, teacher preparation programs, teacher qualification, certification, and so forth (Education week; Jan 8, 2004). Again, findings for these characteristics frequently differ with changing context of teaching. For example, a teacher characteristic may not have equal impact in all levels, subject areas, and student populations. These deliberations indicate a complex construct of criterion, i.e., student achievement which is subject to a host of predictors. Teacher attribute appears to have the most prominent roles in this construct yet which attribute accounts the most is less understood.

Among different teacher characteristics, current assessment is more focused on teacher preparation course. The National Centre for Educational Development (NCED) established under the MOE umbrella in 1993 was the realization of Teacher Professional Development (TPD) as an instrument for teacher quality improvement. Since its establishment, NCED has been successful in its mission in clearing the backlog of untrained teachers in public schools in the country. All qualified teachers in public schools have now received a mandatory 10 month training course. The question however remains, at this juncture, whether completion of a 10 month long training program has brought any significant gains in education system in general and in student achievement level in particular?

As stated earlier, this must be noted that teacher is one of the many factors that influence student achievement and that training is one of the teacher attributes. Making any judgment on a complicated construct of student achievement based on single predictor like teacher characteristics is rather risky. Therefore, relationships between teacher and student attributes require careful assessment maintaining ethical distance to making any concrete generalizations based on poor empirical basis.

Teacher is apparently the most expensive factor in education systems worldwide. In Nepal, over 89 percent of its education budget goes to teacher salary and benefits. It is not just the teacher salary and benefits but teacher professional development is another area in which costs incur on a regular basis. Given the size of this investment, there's yet little clarity on how much teacher factor contribute to student's learning especially in countries like Nepal where all other attributes are at its rudimentary status, such as school environment, school infrastructure, etc. Lack of minimum enabling conditions in public schools is so much widespread that the resources available could do a little, if at all, in improving school conditions. This high level of investment mirrors the general sentiment among policy makers, researchers, and the general public that teachers are perhaps the most valuable resource allocated to student education (Education week; Jan 8, 2004). Teachers being the most expensive factor in the entire education system, it is therefore quite legitimate to hope better results from them.

This section on quality theme emphasizes specifically on different aspects of teacher quality. Student's learning achievement related variables are discussed separately under the efficiency theme.

### Teacher Characteristics

As stated earlier, some of the commonly assessed teacher characteristics are teacher experience, teacher preparation programs, teacher qualification, and certification are used in this assessment. These characteristics are believed to bring some insights on the general quality of the teachers in public schools.

#### Teacher Experience

Teaching experience is commonly observed teacher attributes in effectiveness studies as a correlates of student achievement. It is believed that teachers with less teaching experience typically produce smaller learning gains in their students compared with more seasoned teachers (Fetler, 1999; Murnane & Phillips, 1981). However, most of those studies have also discovered that the benefits of experience level off after the first five or so years of teaching.

Altogether 4,033 school teacher records were assessed in the sampled schools. Of which, number of female and male teachers stand balanced with almost equal distribution (Table 1). In the hill districts, over 90 percent of the teachers are experienced teachers with over five years of experience. Those less experienced ones, five years or below, in the hill districts constitute all female teachers. This may have been due to recent teacher recruitment policy which has encouraged female teachers in all vacant position.

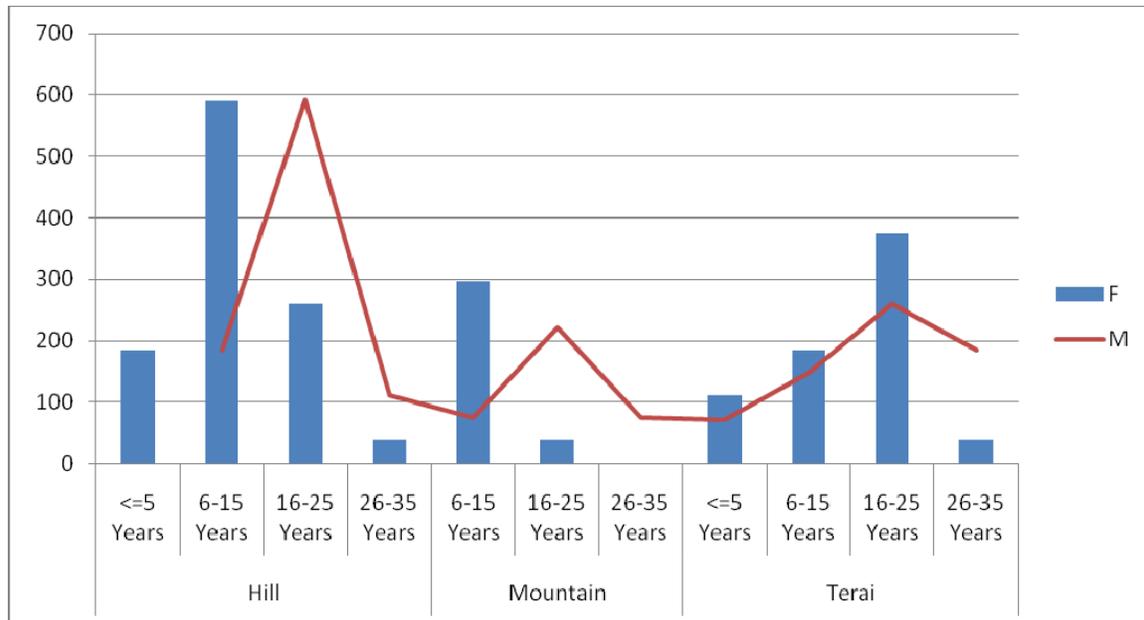
In the mountain region, all the teachers are found to have experience of over 5 years in the teaching. It is in the terai region that about 13% of the teachers have experience of less than 5 years in the teaching (Table 6).

Table 6: Teacher Experience

Region	Age grup	Gender			% of the total
		Female	Male	Total	
Hill	<=5 Years	185		185	9%
	6-15 Years	591	185	776	40%
	16-25 Years	259	593	852	43%
	26-35 Years	37	111	148	8%
Hill Total		1072	889	1961	
Mountain	6-15 Years	296	74	370	53%
	16-25 Years	37	222	259	37%
	26-35 Years		74	74	11%
Mountain Total		333	370	703	
Terai	<=5 Years	111	71	182	13%
	6-15 Years	185	148	333	24%
	16-25 Years	373	259	632	46%
	26-35 Years	37	185	222	16%
Terai Total		706	663	1369	
Grand Total	<=5 Years	296	296	367	9%
	6-15 Years	1072	1072	1479	37%
	16-25 Years	669	669	1743	43%
	26-35 Years	74	74	444	11%
Grand Total		2111	1922	4033	

It is noteworthy to mention that over 50 percent of teachers currently in the system are quite experienced with over 16 years in the teaching and that about 11 percent are veterans in respect of teaching experience with over 25 years in teaching (Figure 1). Most studies have revealed that teaching experience has little impact on student achievement and that too levels off after 5 years of experience. In this respect and based on the above deliberations, it can be ascertained that the teachers in public schools in Nepal are highly experienced. But since most of the teachers have over 5 years of teaching, the impact of teaching experience on student learning can be assumed minimal, if at all.

Figure 3: Teacher experience by gender and geographic region



### Teacher Qualification

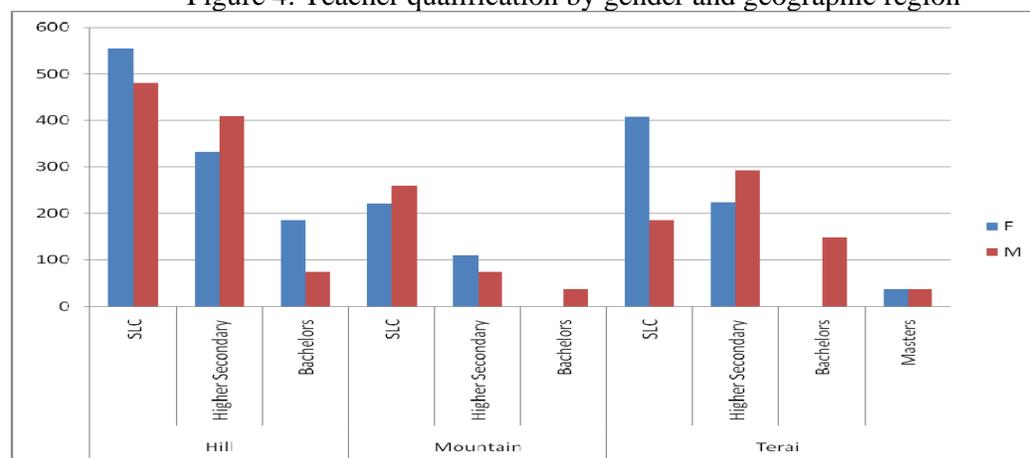
Teacher qualification is the minimum precondition for teaching in public schools in Nepal. The current Education Act and its regulations have prescribed a minimum qualification of SLC or equivalent for a primary level teacher, a higher secondary level qualification for lower secondary and a bachelor's qualification for secondary level. However, the teacher policy document and the School Sector Reform (SSR) Plan has suggest upgrading minimum qualifications as higher secondary or equivalent for Basic Education and master's for secondary education. This provision would require a substantial numbers of teachers going through qualification upgrade.

Table 7: Teacher Qualification

Region	Education group	Gender		Grand Total	Percent of the total
		F	M		
Hill	SLC	555	481	1036	51%
	Higher Secondary	332	408	740	36%
	Bachelors	185	74	259	13%
Hill Total		1072	963	2035	
Mountain	SLC	222	259	481	68%
	Higher Secondary	111	74	185	26%
	Bachelors		37	37	5%
Mountain Total		333	370	703	
Terai	SLC	407	185	592	44%
	Higher Secondary	225	293	518	39%
	Bachelors		148	148	11%
	Masters	37	37	74	6%
Terai Total		669	663	1332	
Grand Total	SLC			2109	52%
	Higher Secondary			1443	35%
	Bachelors			444	11%
	Masters			74	2%
Grand Total		2074	1996	4070	

Based on current teacher stocks in sampled district/schools, 52 percent of teachers have qualifications of school leaving certificate examination (SLC) or equivalent. This is indeed a huge stock in basic education that requires teacher qualifications to upgrade, should the government endorse minimum qualification for teaching in basic education at the higher secondary level.

Figure 4: Teacher qualification by gender and geographic region



The other characteristic feature is that about 11 percent of the teachers have bachelor's level qualification and 2 percent of the teachers have master's level qualification (Figure 2). The common trend in schools is that teacher with higher qualifications tend to teaching in higher level grades such as in the lower secondary and secondary grades. Therefore, a higher qualification among primary grade teachers cannot be taken for granted as a positive factor

unless it is found that those teachers are in fact teaching at their level of employment. Nevertheless, almost all of the teachers in basic education, at the moment, have the minimum prescribed level of qualification and that is SLC or equivalent in primary level.

### Teacher preparation

The Ministry of Education has endorsed policies on teacher training in 2005 that provides strategies for teacher preparation and teacher professional development. The teacher training policy states, “10 month teacher preparation course as pre-service training on the top of the prescribed academic qualification will be made mandatory for primary, lower secondary and secondary teachers at the entry point.” The intent of this policy is to stopping entry of untrained teachers into the system while clearing the backlog of existing untrained teachers through in-service training.

Research suggests that the selectivity/prestige of the institution a teacher attended has a positive effect on student achievement, particularly at the secondary level (Education week; Jan 8, 2004). This may partially be a reflection of the cognitive ability of the teacher. In her analysis of teacher preparation and student achievement across states, Darling-Hammond (2002) reports that “measures of teacher preparation and certification are by far the strongest correlates of student achievement in reading and mathematics, both before and after controlling for student poverty and language status.” She contends that measures of teacher quality are more strongly related to student achievement than other kinds of educational investments such as reduced class size, overall spending on education, and teacher salaries

In contrast to the approach used by Darling-Hammond, which equates teacher quality with specific qualifications, Rivkin, Hanushek, and Kain (1998) identify teacher quality in terms of student performance outcomes. Their research identifies teacher quality as the most important school-related factor influencing student achievement. They conclude from their analysis of 400,000 students in 3,000 schools that, while school quality is an important determinant of student achievement, the most important predictor is teacher quality (Education week; Jan 8, 2004).

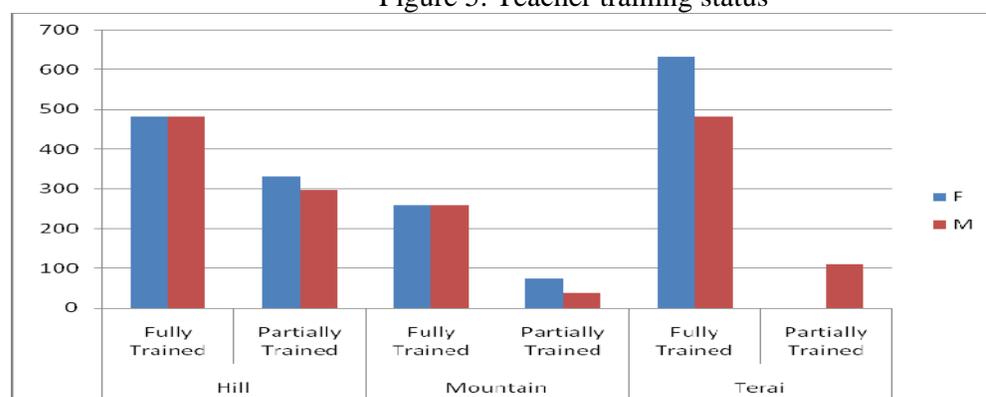
The NCED is currently in its last leg of clearing the backlog of untrained teachers in the system through in-service teacher training program. NCED claims that there are a few teachers who have yet to complete to the course but these numbers are insignificant. What is crucial to note here is that all teachers have received some training at this point (Table 3). Those that are shown as partially trained are in fact in their last bid to completing the training courses.

Besides, in-service training there are other trainings as well such as refresher training, management training to the head-teachers and so forth.

Table 8: Teacher Training Status

		Gender		
Region	Training Group	F	M	Grand Total
Hill	Fully Trained	481	481	962
	Partially Trained	332	297	629
Hill Total		813	778	1591
Mountain	Fully Trained	259	259	518
	Partially Trained	74	37	111
Mountain Total		333	296	629
Terai	Fully Trained	632	481	1113
	Partially Trained		111	111
Terai Total		632	592	1224
Grand Total		1778	1666	3444

Figure 5: Teacher training status



### Teacher Certification

Entry of qualified teacher in the system is considered an important step in assuring quality education. In this respect, the understanding is that having basic academic degree is a pre condition but not the sufficient condition for being a qualified teacher. As such, MOE has introduced a policy of teacher licensing and states that, “teacher license will be made pre-requisite for the teaching profession in the school system. Also provision of license renewal will be established.” Teacher license has been made mandatory for all teachers currently in the system and those willing to join as school teacher in future. Teacher licensing program is underway through the Teacher Service Commission.

There is a lot less consensus about certification. Some reports claim that certified teachers are no better in practice than uncertified instructors (Abell Foundation, 2001) while others assert that certification is an important step in ensuring quality teaching (Darling-Hammond, 2002). A review of research found that certification in a particular subject area, in this case, mathematics, may result in more effective teaching (Wayne & Youngs, 2003). One recent and controversial study found that students of certified instructors out-performed students of uncertified teachers (Laczko-Kerr & Berliner, 2002); however, reviews have called into question the methodology and results of the study (Freedman, 2002; Imai, 2002).

## Access

### **Contribution of teacher training for increased access to children's education**

What should be the focus of teacher education? This question has number of answers. From pedagogical point of view it is a technique to facilitate classroom instruction. Culturally it is a means to get on top salary and a career ladder to the teachers. Socially it is a tool to ensure access and equity of the marginalized community in education. Politically it is an instrument to inculcate a definite philosophy/theory to the teachers. But the analysis of TEP documents (NCED, nd; NCED, 2060 BS) shows that it is a way to identify and handle the children from disadvantaged groups (NCED, nd, P. 4; and NCED, 2060 BS, P. 2 & 6). It is also a tool to create discrimination free classroom (P.7), and also a way to encourage teachers for door-to-door school enrollment campaign (P. 8). This indicates that TEP expected access, equity, quality, and relevancy i.e. access through door-to-door school enrollment campaign; equity through non-discriminatory classroom environment; and quality and relevancy through effective teaching. It also anticipated teachers' ability to analyze learning outcomes (NCED, nd, P. 7).

TEP also expected strengthened community school relationship (P 2; P. 16 point # 8.10) through head teacher. It also wanted them to be instrumental for mother tongue classroom instruction (P. 8 point # 2.11), equity in education for the students of different caste, ethnicity, intelligence, and disabilities (P. 10 point # 4.12 and P. 11 point # 4.12). NCED (2000) also wanted to enable teachers for multi-grade teaching (P. 6 & 9, identify girl student and ethnic minorities' learning difficulties and help them for cooperative learning (P. 26 & 27)

This section deals with the contribution of TEP in-service training on increased access of marginalized children in education. As an outset we reflected on the stocktaking of the decade long 16 researches on teacher education (appendix, ...). This reflection shows two things in relation to access in education. One, teacher training is more focused on classroom instruction than access. Two, other than teachers are expected to enroll more children in education. This was reflected in the earlier studies as well. For instance, METCON (2000) found that that teacher training has contributed less to improve school community relations. Even the imparted training was not found visibly transferred (CRED, 2002; NCED, 2002) in the classrooms (Full Bright Consultancy, 2006) and the communities.

Amidst this historical context we tried to figure out the contribution of teacher training on access. For this we used students' enrollment and GPI as indicators of access to education. Enrollment data of five years suggest couple of things. One, from grade 1 to 5, the girls' enrollment increased through out the years (2060 – 2065) but the number of increased girls ranged from 10 – 20 each year. In the same year and the same grades, the boys' enrollment decreased sometimes and increased in some other years. Even the national scenario followed the same trend. Two, assuming that the students enroll in grade one and not in other grades, we calculated the number of dropouts. This shows that altogether 1140 girls and 1382 boys were enrolled in grade one in the survived 29 schools in 2060. Out of these students, 1140 girls and 1247 boys survived in 2065. This means 242 girls and 271 boys dropout out from the school system. If we calculate the dropout rate from it the figure would be ...% for girls and ...% for boys. This figure is also similar to the national cycle completion rate. These inferences did not give us enough room to claim that teacher training contributed to increase enrollment and reduce dropout rate. Since we do not have the data of the children in school

catchments, we are not able to claim whether the increased and the decreased number of students is the effort the school teachers and other stakeholders of education.

We also tried to compare GPI and see whether there is any contribution of teacher training to it. The table below specifically displays it.

Table 9: Overall GPI rates

Year in BS	2060	2061	2062	2063	2064	2065
GPI on enrollment	93.8	92.8	91.5	93.1	94.8	97.8
GPI on repetition	91.8	85.3	91.9	100.1	92.1	99.0
GPI on promotion		92.7	94.0	94.0	94.3	98.8
GPI on dropouts	101.6	93.3	76.3	79.7	70.6	90.2

The table above shows that GPI has been improved in terms of enrollment, repetition, promotion, and dropouts. This improvement indicates that more girls are enrolled in school, promoted in school. It also gives impression that parents are aware of sending their girl child in school. The repletion and the dropout rate mentioned in the table above indicate it. But if we compare the national statistics of the same period it does not show the significance differences between the studied schools and the other schools of the country. This again did not help us to claim and not to claim the contribution of teacher training for improved GPI. However the varying degree of GPIs suggest that the improvement rate does not follow a definite trend. The table herein below gives a picture of it.

Table 10: GPI of the community managed school

Year in BS	2060	2061	2062	2063	2064	2065
GPI of community managed school on enrollment	103.8	106.6	99.8	99.0	92.4	97.4
GPI of community managed school on repetition	91.5	90.6	108.0	110.0	89.9	74.9
GPI of community managed school on promotion	NA	118.7	109.6	98.1	102.9	96.3
GPI on of community managed school on dropouts	73.6	116.1	102.4	68.9	58.0	88.4

The year specific GPI analysis of the table above shows no definite trend. This signifies that the teacher training did not contribute to ensure a pattern for 1.00 GPI. If we analyze the same data from enrollment, repletion, promotion, and dropout then again we did not find the contribution of the teacher training. For instance, the number of girls and boys decreased in all the years. Only grades 4 and 5 were exceptional where number of students increased by 1 to 2 persons a year. But the decreased rate of the students in community-managed school was 13 to 19%. This decreased rate of student enrolment challenged the claim of the previous studies done in favor of community-managed schools. The same scenario was observed in the case of repetition as well. In other words repletion rate decreased in grade 1 – 3 but it increased in grade 4 and 5. If we calculate the figure of the five years as unit this

study found that repetition rate decreased by ...for boys and ...for girls. This finding was recalculated to see its relation with the national rate of repetition. This calculation shows no significant difference between the national and the surveyed school. Apart from it, we also computed the dropout rate of the surveyed schools. This calculation showed that dropout rates decreased by 10 – 15%, which is at par with the national average.

The data were reexamined to see the difference between the ETC and the non-ETC schools. For this we calculated the GPI and came up with the following result.

Table 11: GPI of the non-ETC and ETC schools

Year in BS	2060	2061	2062	2063	2064	2065
GPI of ETC and non-ETC schools on enrollment	89.8 (94.8)	88.2 (94.0)	89.5 (92.1)	98.1 (91.7)	98.3 (93.9)	107.5 (95.3)
GPI of ETC and non-ETC schools on repetition	73.6 (97.8)	70.9 (88.5)	109.0 (88.7)	81.9 (105.3)	105.7 (89.3)	91.0 (100.9)
GPI of ETC and non-ETC schools on promotion	NA	89.9 (93.4)	96.9 (93.3)	95.2 (93.6)	100.3 (92.7)	104.0 (97.4)
GPI of ETC and non-ETC schools on dropouts	104.2 (100.6)	64.0 (109.4)	62.1 (84.2)	99.1 (72.9)	65.9 (72.4)	101.0 (86.5)

Note: the GPI of the parenthesis indicates the status of ETC schools

The table above shows that GPI promotion rate of the ETC schools has been improved in all the years. But this was not so with dropouts, repetition, and enrollment meaning that teacher training had not yielded the significant contribution in these areas. In the case of promotion, the result was opposite; this means teacher training had been instrumental to make more students promoted. The reason was that schools introduced liberal promotion and continuous assessment system. The other reason was that the teachers were trained to assess students' objectivity. In this sense, teacher training had contributed to increase promotion rate of the students. This finding was similar to all the schools regardless of their types.

Efforts were also made to see the contribution of teacher training in improved access to education. For this we recalculated the data in terms of their topographical dispersion. As we found,

Table 12: GPI of the topographical regions

Year in BS	2060			2061			2062			2063			2064			2065		
	T	H	M	T	H	M	T	H	M	T	H	M	T	H	M	T	H	M
Topographical GPI on enrollment	87.3	104.6	122.5	86.2	104.1	125.6	85.6	101.2	146.2	88.0	103.4	117.9	94.8	93.6	142.9	91.8	103.6	120.2
Topographical GPI on repetition	91.8	90.2	140.0	71.1	107.0	114.3	81.1	108.2	155.6	97.9	102.6	183.3	88.8	97.0	85.7	96.6	105.6	73.3
Topographical GPI on promotion	NA	NA	NA	86.6	105.6	137.0	88.1	94.0	170.7	89.7	99.9	104.6	89.6	114.7	104.1	98.4	96.2	170.5
Topographical GPI on dropouts	87.3	113.2	366.7	90.5	98.2	66.7	62.8	101.9	65.4	68.1	100.4	107.1	69.2	71.1	92.6	84.1	98.6	193.8

The topographical analysis of the field data also reiterated the earlier findings that teacher training had contributed to the increased promotion rate. But in other cases, it could not show its effect on increased enrollment, reduced repetition and dropout of the students.

Apart from the quantitative data we generated qualitative information through focus group discussion, researchers' observation, and individual interview with the key informants. With few exceptions, the information thus obtained from different sources provided the clue that teacher training contributed to increased enrollment and promotion, reduced dropout and repetition. The table below displays the result of the qualitative information.

Table 13: Perceptual information related to the contribution of teacher training for improved access to education

Informants	Response from Terai	Response from Hill	Response from Mountain
Teachers/Head teachers	Increased students' enrollment through door-to-door campaign, reduced dropout. But the problem is that there are too many students and hence we have difficulties to handle them properly	Increased the number of Dalits and Janajati students in schools	Retained more children in school. But the better students go to private boarding schools
SMC/PTA	Enrolled children from marginalized community	Increased students' enrollment	Enrolled more children in school
DEO	Enrolled more Dalits and Janajati children in school	Scholarship program helped bring more children in school	Improved access of disadvantaged children in school. But they drop out very early
Students	NA	NA	Enrolled more children in school but dropped out because of early marriage

The informants, regardless of their topographical identity perceived that teacher training became instrumental to enroll more children of the disadvantaged community in school. But at the same time the quantitative data did not support their statements. There are different reasons for it. For instance the information that we copied from the school registration is different from their reporting. The first type of record was for official consumption and the second was the actual one. The second was that the informants did not care for the recorded information and hence they mentioned it as they found. However their concerns towards dropouts was found valid because it was the problem of the studied schools. Herein below are the cases of the Terai, hill, and mountain that complement the above findings.

**Case of Barahi Secondary school of Baglekh Doti**

Programs such as, welcome to school program, Door-to-Door program, Scholarship program to Dalits and Non- Dalits helped in bringing students in school. Similarly, the involvement of the NGOs and INGO in school and organizing social campaign have changed the bad traditions in the community. The helpful/ dedicated/ motivated teachers and cooperative head teachers played vital role in bringing positive change in overall development of students and school.

Case of Shree Krishna Sanskrit and Sadharan School, Itram, Surkhet Parents from Dalit and marginalized community are highly motivated to send their children to the school. Girls are also highly encouraged in education instead of expecting domestic help.

**Case of Nepal Rastriya Primary School Sishaniya VDC-01, Bara**

Number of enrollment of Dalit and Janajati students in various classes is found 100%; as reported in FGD (*FGD with both teachers and SMC members*), there are neither Childs who are deprived of primary school education in the catchments area of school; where as dropouts can't be found checked out. But the number of enrollment of girls was found less.

The cases above showed three things. One, almost all school age children are in school because of the motivated parents and door-to-door school enrolment campaign and the booster scholarship. Two, motivated teachers and supportive head teachers are the important forces to bring more children in school. Three, dropout has been the major problem among the first generation students. This implies that people perceived the importance of teacher training to improve access of the marginalized children in education. At the same time they also demanded refresher training as well. These evidences tell that teacher training has been geared towards classroom facilitation than social relations to ensure access to education.

In order to cross check whether the aforesaid findings were the result of teacher training program or not, we reviewed the teacher training contents and compared the contents against the teachers' doing that we obtained from field information. The table below displays them.

Table 14: Learnt content vs. teacher accomplished activities for access to education

Training contents	Accomplished activities for access to education
Prepare the map of the school catchments and ensure each child's participation in school  Visit the homes of the weak students for their additional support  Organize meetings with community members and parents on thematic issues related to school enrollment, achievement, and participation in education	Door to door campaign Joint initiatives with I/NGOs to bring children in school
Be instrumental for physical improvement of school	Some sporadic cases were reported
Develop School Management Information system and update it	Not Reported
Establish school community relations	Some teachers were developing and maintaining school community relations

Source: Primary teacher training curriculum (In-Service) Third Phase, Oct. 2000.

The table above explicitly showed that teachers learnt some of the way outs to ensure the access of education to the disadvantaged children. But they also used the contemporary approach such as door-to-door campaign to bring more children in school. Apart from it the some teachers became instrumental to improve school community relations. At the same time they failed to apply the knowledge given to them. These unused knowledge/skills are the use of SMIS for ensured access of the child in school and/or supply education to his/her doorsteps. This shows that more contents and skills are to be added in the teacher training contents so that the teachers could yield the desired result.

The discussion above shows that teacher training enabled them to go for students' enrollment. For this they door visit program once in a year upon the DEO's formal call. But it could not be school's own program. This means school did not keep household record of its catchments not the local government had kept such data. The data lacking could be addressed by making teachers accountable for school catchments survey each year. The other option could be the

use of local government resource for school catchments survey through teacher force. The second option could also be helpful to ensure functional linkage between the teachers and the local government. This also would open the door of open school program for the children who for some reasons do not admit in school and or want to continue their learning at home. Following chapter discusses about the contribution of teacher training in equity.

## Equity

### **Contribution of teacher training for increased equity in education**

Equity means special treatment to the special group of people. These specialties include grade, class, language, gender, caste/ethnicity/religious, cultural, learning, and many other differences. In order to address these differences TEP introduced number of contents. For instance, NCED second phase teacher training curriculum (2000) included the content to analyze learning outcomes and treat them accordingly (P.7). So did the third phase curriculum to introduce multi-grade teaching (P. 6); multilingual management; handle learning difficulties (P. 26); address the difficulties of the ethnic groups (P. 27); and support the children of disadvantaged groups (NCED, nd. P. 4 & 7). NCED also trained head teachers to introduce mother tongue (competency # 2.11 P.8), manage student admission system to make Dalit and women competent (competency # 4.12 P. 10), and introduce multi-intelligence teaching method for special need children (competency # 4.12 P. 11).

Teacher training program has made efforts to address the aforesaid objectives and the concerns in the past and even to do. In order to find out the result we reviewed the earlier studies and also did field work. The earlier studies showed that trained teachers motivated students of different backgrounds (NCED, 1996); they also applied group teaching methods (NCED, 1998); encouraged students for better interaction (CERD, 2002); used varieties of teaching methods to help students of various abilities (ICS Education Campus, 2002); and still they were not that effective to address classroom diversities as per the required extent (Full Bright Consultancy, 2006; Subedi, 2009). These findings gave impression that there are many things to be done to ensure equity in education through teacher training.

Going back to the analysis of TEP curricula and the earlier studies, we now examine the field findings related to the contribution of teacher training on equity in education. Such equity was assessed in terms of gender parity, diversity inclusion in classroom teaching, disability handling, multilingual facilitation, and multi-intelligence addressing approaches. For this we analyzed quantitative data for gender parity and for other forms of diversity management we used qualitative information generated through researchers' reflection, case study, and in-depth interviewing.

There were four ways to find out the equity status in education through quantitative data. One, collect the actual number of school going age children belonging to different caste/ethnic/religious groups of people of the school catchments and compare with the data of the in-school students'. Two, analyze the SIP data and compare it with that of the school survey data that we obtained. Three, calculate the data of the flash report and compare it with the field data that we gathered. Four, analyze the caste/ethnic/religious groups of the students of the studied schools and compare them with the national share of these groups of the people in education. Out of these four approaches, we applied the third approach to find out the equity status of different caste/ethnicity/religious groups. The reason was that we did not

have the field data of the school catchments. We also did not have adequate information in the SIP that would provide comparative picture. Besides all the studied schools did not have all the caste/ethnic/religious groups who could be comparable with the national figure. So we used the left option i.e. analyze the flash report, see the share of these groups of the students in school and claim whether teacher training could contribute to increase the share of these groups in education. Following this option we found that teacher training to some extent contributed to ensure equity in education.

Reality check in the field showed that some of the groups of people are overly represented and some others are under represented despite the claim that almost all the school age children are in school. Thus equity is still to be maintained in schools.

Apart from the hard data, we generated the soft data to crosscheck the equity status in education. Contrary to the hard data the soft data mentioned that teacher training ensured equity inside the classroom. This implies that equity should be sought out at two levels; quantitatively it should be sought out in the societal composition and qualitatively it should be examined in school. The table below presents the perceived in-school equity status.

Table 15: Perceived contribution of teacher training for in-school equity

Informants	Response from Terai	Response from Hill	Response from Mountain
Teachers/Head teachers	Equal opportunity for students to share their ideas and experiences; Creation of child friendly environment in school. But the problem is that teachers themselves send their children to private boarding schools	Reduced discriminatory practices on the basis of caste, ethnicity, religion, and sex  Reduced corporal punishment	No discrimination
SMC/PTA	None discriminatory classroom environment; inclusivity is maintained in the classroom.	Teachers love students more They do not discriminate schools no matter they are from HIV infected groups	No discrimination
DEO	Paradoxes exist because there are high caste teachers and low caste students in the classroom. And yet teachers are informed about the issues to be dealt with	No bias against students and in corporal punishment in school	No discrimination
Students	NA	No discrimination in classroom; Teachers treat students in a friendly way	No discrimination

The table above shows that teacher training contributed to reduce corporal punishment, inculcate the habit of giving up the discriminatory behavior against the students of different socio-cultural and physical status, develop the habit of being friendly with the students, and make teachers inclusive in the classroom. Despite these positive contributions of teacher training for equity assurance, the informants were concerned about the teachers' paradoxical doings. These doings include (a) teachers themselves perpetuate discrimination by sending their wards in private boarding school and (b) they knowingly or unknowingly maintain caste/ethnic/religious hierarchy even in the classroom. The analysis of these paradoxes shows that teachers still need to identify various forms of classroom inequalities and treat them accordingly. The cases below present some of the inequalities that are to be addressed.

**Case of Pharsatikar Higher Secondary School, Rupendehi**

Teachers and school management-committee have tried to bring the marginalized children in school by motivating them. For this they provided midday meal, clothes, and scholarship. And yet, repetition rate has not been decreased.

**Case of Yesodhara Ma. Vi., Taksar, Bhojpur**

In FGD teachers said that they mix male and female students in each bench. Sometimes, they nominate marginalized group students as a classroom monitor. They also involve both marginalized and other caste students in different program without any bias.

**Case of Shree Secondary School, Kuwarampur, Dhanusha**

Students of this school belong to Maithili language groups. They don't speak Nepali but teachers teach them in Nepali without using language transferability approach. Because of this situation students have faced difficulty in learning. But the teachers and the school administration are not taking care of it, as the parents opt for.

The cases above gave four scenarios. One, teachers have made efforts to be inclusive and accommodative to treat the students of marginalized community. For this they gave material incentives and psychological support to the children, and also involved them in school programs indiscriminately. Two, teachers gave leadership role to the children of the marginalized community and made them acceptable to the children of the other caste/ethnic/religious groups. Three, teachers were promoting gender equity through sitting arrangement. Four, and yet, they were not found research oriented and creative to address language generated inequity. The table below gives the rundown of the teachers' efforts to ensure equity in education along with the contents taught them during their training.

Table 16: Learnt content vs. teacher accomplished activities for equity in education

Training contents	Accomplished activities for access to education
Identify girls and marginalized children's difficulty and address them	Midday meal, clothes, and scholarship support to the needy students  Motivation program for the marginalized children  Gender equity by changing the sitting arrangement of the students Leadership transfer to the children of the marginalized community
Develop subject corner in each class	Not reported
Construct achievement test and administer it to address the needs of the children	Not reported

Source: Primary teacher training curriculum (In-Service) Third Phase, Oct. 2000.

The table above shows that teachers have used more classroom focused approach to equity in education. In doing so they have made efforts to replace the hierarchic mindset by the egalitarian mindset. Some of the ways were taught to them and others were not. And yet the teachers of the studied areas have been able to implement some of the differential ways to address inequity in education. But there were some others that were taught to them but were not practiced by the trained teachers. This indicates that teachers need additional support to ensure equity in education. One of them was to handle bilingual/bicultural/ multiple disabilities/multi-intelligence and the likes.

The discussion above gives the knowledge that teacher training has been one of the forces to promote equity inside the classroom. This means structural inequity that the culture carries is yet to be addressed by making teachers as social change agent. It also shows that they are supposed to prepare students for social change through project work. This also indicates that teachers should be trained along with the community elites and the student representatives to bring changes at a time. It also provides the clue that teachers should be given training in the areas of their concerns. Such concerns should be identified through teacher research, discussion sessions in the school, and expert led RRA research of the school. The information thus collected should be linked with the curricular contents and adjust them locally. For this the mater trainer and the teacher trainers should be reoriented through action research.

## Efficiency

### Teacher Efficiency

#### Introduction

The teacher characteristic that is arguably most frequently associated with teacher effectiveness in studies is the score on tests related to verbal and cognitive skills ... (Harris, 2007). Using the methods commonly called as gain score method, the relationship between teacher training and student achievement have been analyzed in this study. Wastage in current education system in Nepal is extremely high with high repetition and dropout rates and low promotion rates especially in early grades. Therefore, efficiency indicators such as promotion, repetition and dropout rates have been also used as a broad construct to assessing teacher effectiveness in this study.

#### Student Achievement (gain score)

Learning achievement is the ultimate goal of almost all of education interventions and it is more so when it comes to teacher inputs as it is the most expensive factor. In order to assessing student achievement gain, two separate sources were used to compare. The first bench marking score were taken from school's own test records and second score was based on external test taken to the same student at a different point in time. There may be some down side in this approach as the tests were administered by different people at different time and using different methods. Nevertheless, the tests taken externally were standardized and were already used in earlier research at the national level.

The results of school based tests and external tests reveal quite a remarkable achievement in student gain score. These have been discussed categorically under the following sub headings:

#### Student Score in key Subject Areas

Four key subject areas such as English, Math, Nepali and Social Studies were taken for the comparison across geographic regions. Likewise, a cross-section was also made by grades taking the 3<sup>rd</sup> and 5<sup>th</sup> grades for further comparisons. Student score were grouped into four categories as below 32, which is a failing score in the current examination system; likewise, 32-44 which also denotes as passing in third division; similarly, 45-59 which denotes as passing in second division; and finally 60 and over which denotes passing in the first division.

Table 17: Comparison of scores before and after

Region	Grades	Score Group	English		Math		Nepali		Social		Grand Total	
			Before	After	Before	After	Before	After	Before	After	Before	After
Hill	3	<=31	51	9	65	12	24	3	11	8	12%	9%
		32-44	25	27	10	37	22	33	9	26	10%	34%
		45-59	7	16	6	15	25	18	22	27	24%	21%
		60 +	8	39	8	25	22	39	49	30	54%	37%
	3 Total		91	91	89	89	93	93	91	91		
	5	<=31	47	9	50	9	14	2	15	6	16%	7%
		32-44	24	37	24	48	21	38	28	42	30%	46%
		45-59	13	30	8	18	28	35	32	31	34%	32%
		60 +	6	14	4	11	29	17	18	14	19%	16%
	5 Total		90	90	86	86	92	92	93	93		
Hill Total		181	181	175	175	185	185	184	184			
Mountain	3	<=31	5	4	4	1	2		2	2	25%	20%
		32-44	2	1	1	6	3	6	2	3	25%	46%
		45-59	1	3	3	1	1			1	0%	14%
		60 +	1	1	1	1	3	3	4	2	50%	20%
	3 Total		9	9	9	9	9	9	8	8		
	5	<=31	5		4		1				0%	
		32-44	5	7	6	3	6	8	6	6	60%	50%
		45-59	1	4	2	8	1	3	3	3	30%	38%
		60 +	2	2	1	2	4	1	1	1	10%	13%
	5 Total		13	13	13	13	12	12	10	10		
Mountain Total		22	22	22	22	21	21	18	18			
Terai	3	<=31	28	1	27	2	21		14	4	25%	3%
		32-44	12	28	3	12	17	17	8	20	15%	37%
		45-59	8	10	6	11	8	17	11	8	20%	22%
		60 +	5	14	8	19	9	21	22	23	40%	37%
	3 Total		53	53	44	44	55	55	55	55		
	5	<=31	27		35	2	12	1	20	1	37%	2%
		32-44	20	23	4	17	15	19	10	18	19%	36%
		45-59	6	18	11	19	8	14	19	16	35%	31%
		60 +	2	14		12	21	22	5	19	9%	31%
	5 Total		55	55	50	50	56	56	54	54		
Terai Total		108	108	94	94	111	111	109	109			
Grand Total		311	311	291	291	317	317	311	311			

Table 17 above brings some interesting results on student achievement. The results are quite promising as the number of students scoring above 60, a first division marks, is quite high. In the terai region, number of student scoring below the pass marks has dropped quite dramatically between the two points of student assessments – before and after. Even in the hills, the rate of failing students is below 10 percent. It is only in the mountains that the failing rate is about 20 percent but that too is only in grade 3 and not in grade 5.

From the same external test, it is found that in an average percent of students scoring 45 and above are higher than the number of students scoring below that bench marking. Among the four key subject areas in which the tests were taken, Nepali stands out as the best subject with

highest number of students scoring over 45 in an average followed by social studies, English and finally math. In an average, the rate of failing students is below 10 percent in all subjects in which tests were taken.

A comparison of scores across the four key subject areas reveal that apparent gain score is discernible in English and Math compared to the other two subjects. Quite noticeably, these two subjects were considered as the most difficult subject in which majority of students happen to fail in the past (Figure 1).

Figure 6: Student Average Score Before and After

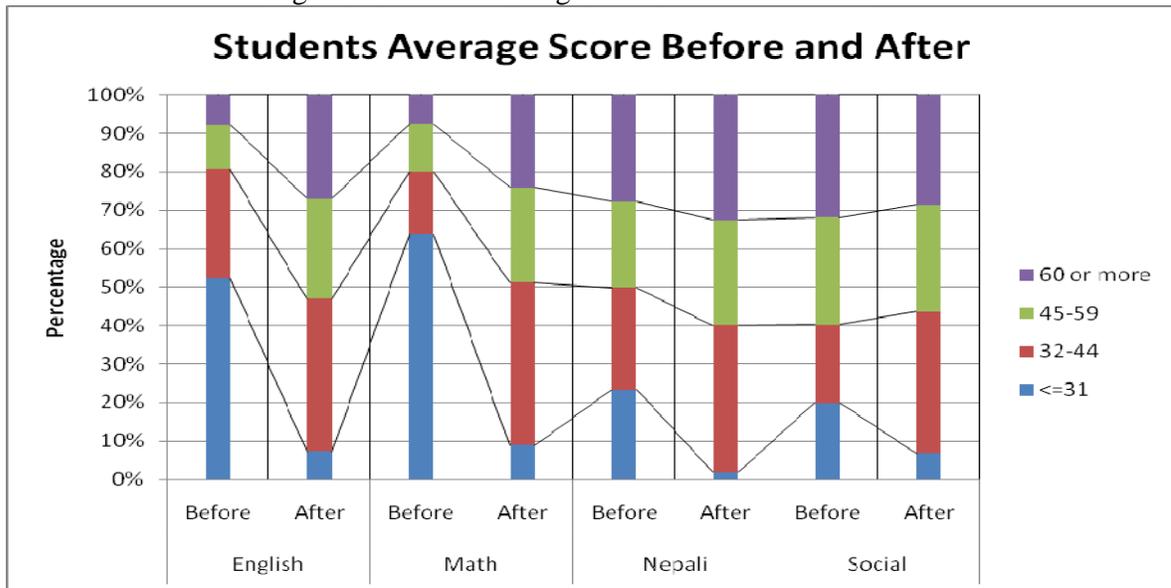


Table 18: A comparison of average score taken before and after

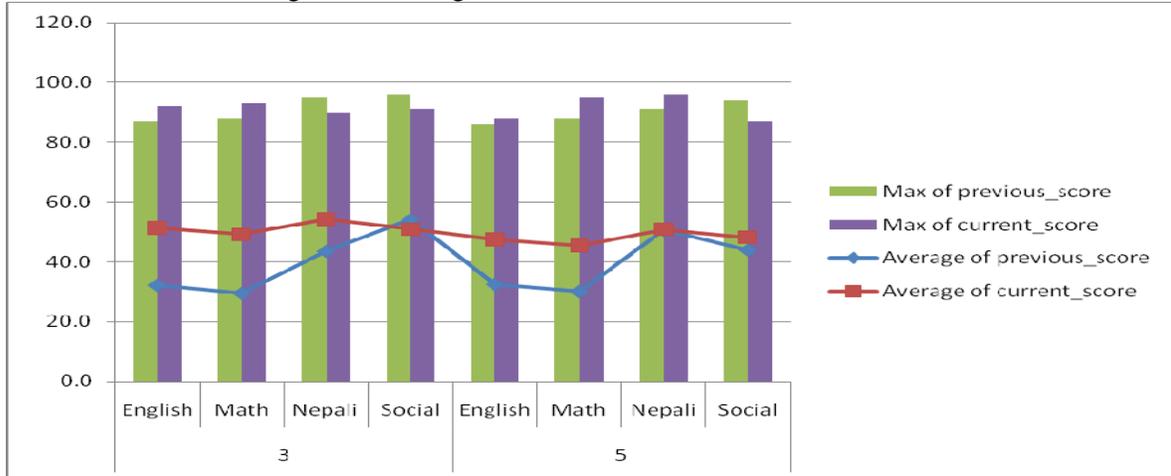
Score Group	English		Math		Nepali		Social	
	Before	After	Before	After	Before	After	Before	After
<=31	52%	7%	64%	9%	23%	2%	20%	7%
32-44	28%	40%	16%	42%	26%	38%	20%	37%
45-59	12%	26%	12%	25%	22%	27%	28%	28%
60 or more	8%	27%	8%	24%	28%	32%	32%	29%

A substantial decline in test scores before and after is noted among students in the group who earlier scored below 31 - a failing score (Table 18). The percentage of students in this group has declined sharply in the tests taken externally suggesting that the level of cognitive ability among student is higher than the school based test reveals. The average scores of students in those sampled schools show a significant increase than earlier score (Figure 7).

Since the external tests were standardized tests, it could be further argued that there might be a need to examine the regular test taking practices in schools that might have caused students become unable to demonstrate their true potentials. Nevertheless, for this study, the finding is that the level of understanding among students is higher than it is thought and that the impact of trained teachers on the rise of student's cognitive levels could be easily understood, although this study does not establish a direct cause and effect relationships.

The focus group discussion and qualitative enquiries made among teachers, students, SMC/PTA members and the DEOs further supports that there is indeed an increment in the learning achievement.

Figure 7: Average Student Score- Before and After



Grade Repetition

High repetition in early grades of basic education is the characteristic feature of education system in Nepal which has remained consistently high throughout the years. The national average grade repetition rate in grade one is over 28 percent (Flash, 2008). Last 6 years annual data (from 2060 – 2065) were compared to assess effectiveness in schools. It reveals quite insignificant change in repetitions over the years. A slightly lower repetition is noted in case of total student population. But, there is a slight increase in repetition among Dalit and Janjati populations (Figures -and -) This trend is similar across geographic regions and also between male and female populations.

Figure 8: Repetition by gender and ethnicity

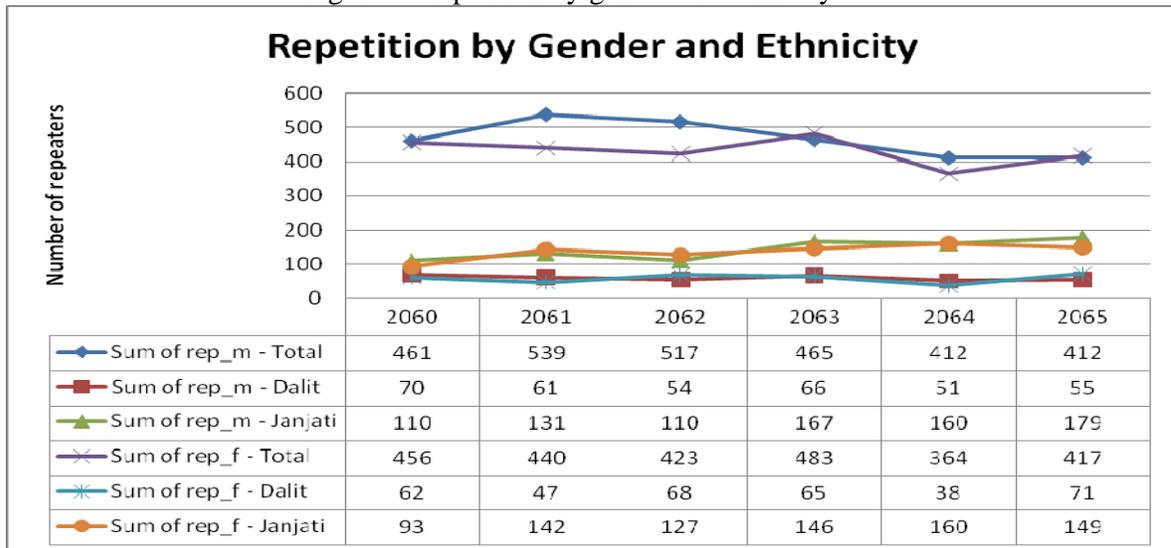
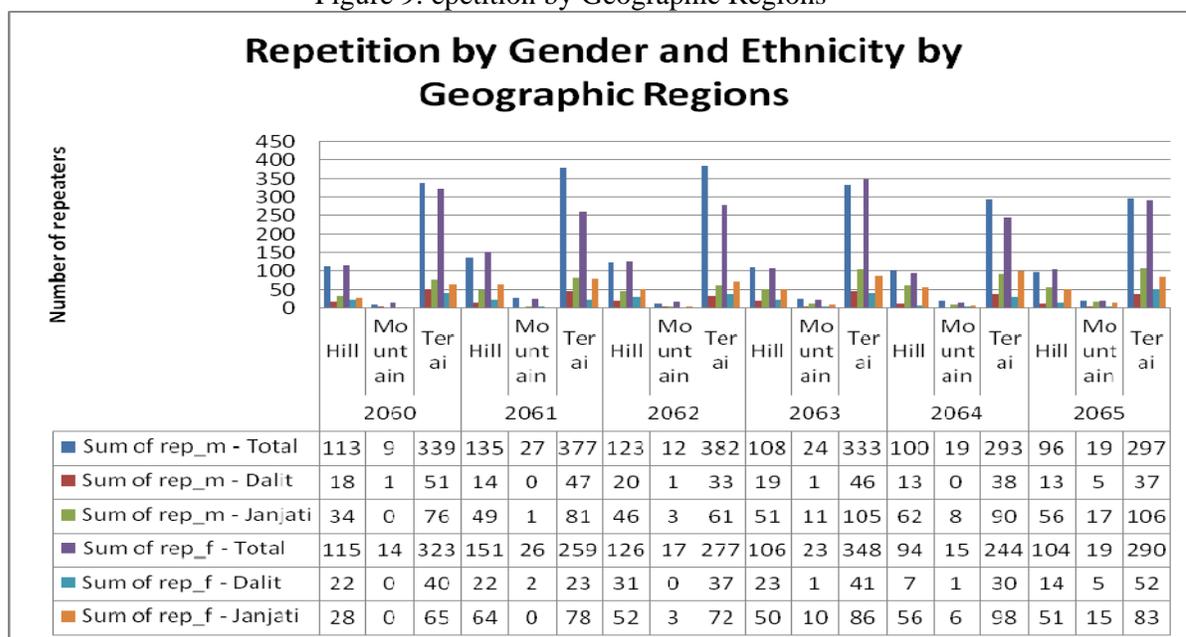


Figure 9: repetition by Geographic Regions



### Dropout

While strict enforcement of compulsory education laws in most developed countries have prevent dropping out in early grades, most developing countries are grappling with this phenomenon. In Nepal, dropping out in early grades is equally alarming and that it has also been the cause of the huge wastage in education system. The national average dropout rate is around 12 percent in grade 1 (Flash, 2008).

Comparing data over last six years in sampled schools did not yield any satisfactory results but rather it is found to be in the increasing trends (Figure 5). Again, this trend is almost uniform across geographic regions, ethnicity and also between the gender (Figure 6).

Figure 10: Droup outs by gender, ethnicity

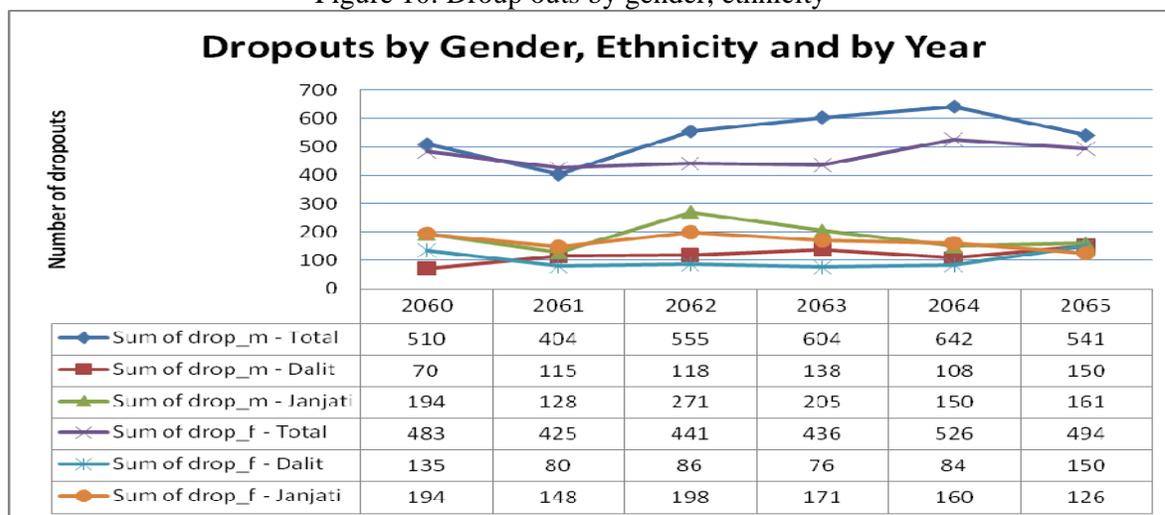
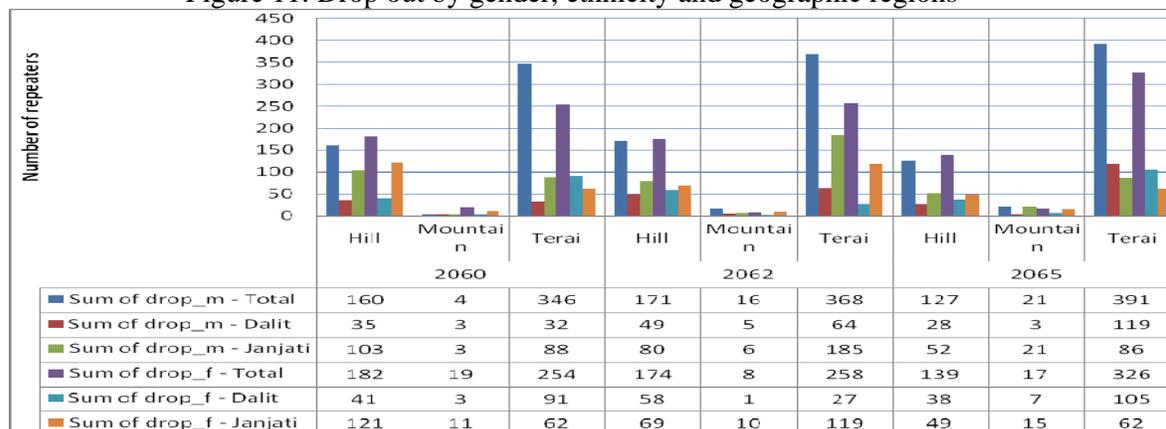


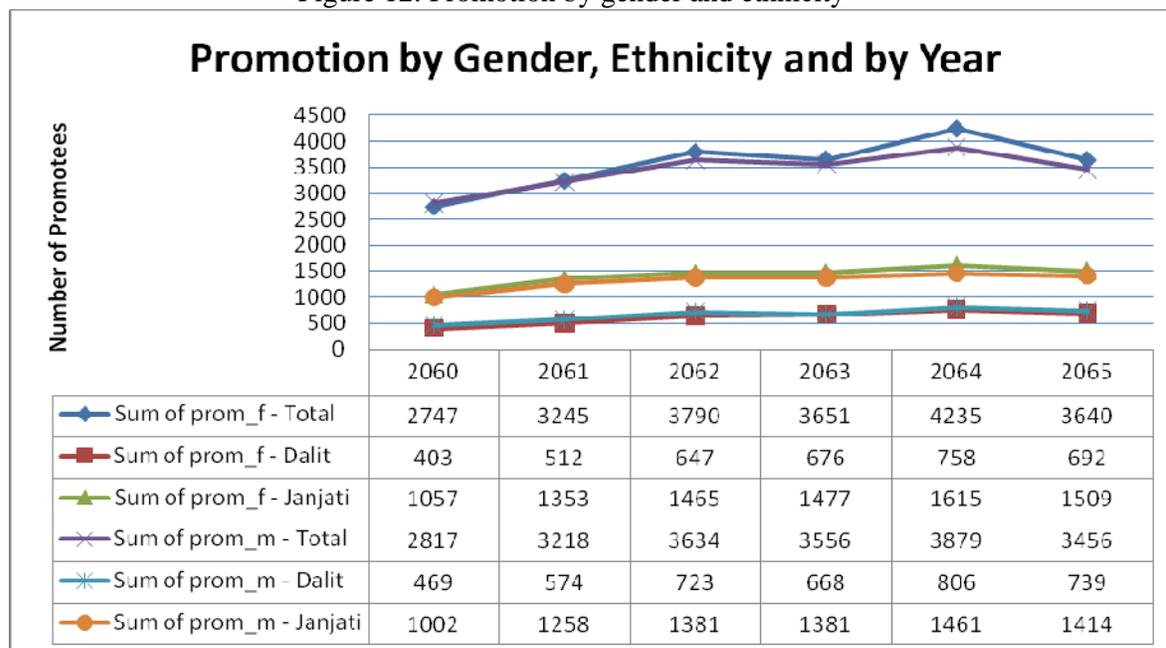
Figure 11: Drop out by gender, ethnicity and geographic regions



### Promotion

Promotion rate is another component of internal efficiency in education system. According to Flash Report (DOE, 2008), near about 60 percent of the students enrolled in grade 1 get promoted to the next grade at the end of the first year in school. In the last six years, there has been only a nominal increase in promotion noted in the sampled schools. Such increment among Dalit and Janjati populations is much less compared to the total populations. The trend of increment is almost symmetrical between the gender (figure 12).

Figure 12: Promotion by gender and ethnicity



### Qualitative enquiry on teacher Quality and effectiveness

Using semi structured interview tools, a comparative enquiry on teacher's quality and effectiveness were assessed among teacher and head-teachers, SMC/PTAs, DEOs and students. From a production function perspectives, these response could be logically assembled as process, output and outcome level of response.

At the process level, most response were about teachers ability to using variey of teaching methods, adopting child centered learning approach, and developing materials locally. There seems to have a concensus across geographic regions and among different respondents that the teachers have applied variety of methods and child centered learning approach.

At the output level, most response coincide with a a few major items such as increased pass rate and improved achievement scores. The external tests taken by the research team also reveals that both the pass rates and achievement scores have increased. However, students, among other stakeholders, are a bit reluctant to accepting increased learning score.

At the outcome level, the SMC/PTA and the DEOs have agreed that there has been an improvment among students in their inter personal behavior leading to active participation, and has improved teacher stuent interactions.

While there was no complaints recorded from among the teachers, DEOs, SMC/PTA, and even students have had several comments over the training porgram and teacher behavior. SMC/PTAs complained that teachers often focus more about their benefits and promotions and less on improving quaiy of education. They also complained that the teacher training has only become a formality and that it has not helped much to improving student achievement. The DEOs were even more critical to saying that the teacher training programs has not made any difference and that the sole purpose of the training is for allowances and promotions.

Table 19: Summary of qualitative inquiry

Hill Districts: Baglung, Bhojpur, Dailekh, Dhading, Doti, Kavre, Makwanpur, Panchhthar, Parbat, Pyuthan, Surkhet, Tahanu, Lalitpur

Teacher head-teacher	SMC/PTA	DEO	Student
<ul style="list-style-type: none"> <li>Used student centered learning approach (10)</li> <li>Developed/used materials (16)</li> <li>Used verities of teaching methods (19)</li> <li>Improved teacher-student relation (5)</li> <li>Subject focused teaching (2)</li> <li>Improved student evaluation (4)</li> <li>Increased pass rate (9)</li> <li>Scores increased (6)</li> <li>Better question papers for test (3)</li> </ul>	<ul style="list-style-type: none"> <li>Teacher focused on their promotion rather than quality,</li> <li>Still tradition teaching methods</li> <li>Student centered learning (4)</li> <li>Materials developed/used (7)</li> <li>Score increased (7)</li> <li>Active students (3)</li> <li>Improved teaching learning (3)</li> <li>High passed rate (3)</li> <li>Improved interpersonal behavior among students (4)</li> <li>Teacher use various teaching methods (7)</li> <li>Home work habit increased (2)</li> <li>Teachers became more creative</li> <li>Private schools increased due to our decreasing quality</li> <li>Teachers training has not done much to improve results</li> <li>Score not improved though</li> </ul>	<ul style="list-style-type: none"> <li>Improved teaching materials (6)</li> <li>Student centered learning (11)</li> <li>Used varieties of methods (4)</li> <li>Improved evaluation (2)</li> <li>Scored increased (5)</li> <li>Active students</li> <li>Training has not made any difference (2)</li> <li>Training is taken for allowance only (2)</li> <li>Training has taken as promotion only (4)</li> </ul>	<ul style="list-style-type: none"> <li>Score improved</li> <li>Teachers methods improved better</li> <li>Teachers read for themselves and say they have exam.</li> <li>Our results not improved</li> </ul>
Terai Districts : Bara, Bardiya, Dhanusha, Kapilbastu, Rupandehi, Siraha, Sunsari			
<ul style="list-style-type: none"> <li>Use verities of teaching methods (19)</li> </ul>	<ul style="list-style-type: none"> <li>Learner centered techniques (3)</li> </ul>	<ul style="list-style-type: none"> <li>Teachers learnt various methods (2)</li> </ul>	

<ul style="list-style-type: none"> <li>• Learner centered techniques (14)</li> <li>• Used local materials for teaching (7)</li> <li>• Students' evaluation improved (8)</li> <li>• Liberal pass policy is hindrance</li> <li>• Classroom management improved (3)</li> <li>• Score improved (5)</li> <li>• Improved use of teaching materials (5)</li> <li>• Pass rate increased (6)</li> </ul>	<ul style="list-style-type: none"> <li>• Used verities of teaching methods (3)</li> <li>• Scores improved (3)</li> <li>• Use training materials (2)</li> <li>• Pass rate increased (2)</li> <li>• <i>Training has become formality only</i></li> </ul>	<ul style="list-style-type: none"> <li>• Too much workload for teachers</li> <li>• Learner centered techniques</li> <li>• Scores improved (2)</li> <li>• Assessment improved</li> <li>• Study habits (of students) improved</li> <li>• Used various teaching methods</li> </ul> <p><i>Training is taken for promotion, grading and financial benefits only</i></p>	
Mountain Districts: Dolakha, Jumla, Mustang, Rasuwa, Sindhupalchowk			
<ul style="list-style-type: none"> <li>• Student centered learning (4)</li> <li>• Increased pass rate (4)</li> <li>• Use verities of teaching methods (2)</li> </ul>	<p>Increased pass rate</p>	<ul style="list-style-type: none"> <li>• Improved use of teaching materials</li> <li>• Used verities of methods</li> <li>• <i>Long vacation is limiting performance</i></li> <li>• <i>Training is taken for promotion only</i></li> <li>• <i>Training is taken as facility only</i></li> </ul>	<p>Teacher used verities of methods</p>
Process	Output	Impact	

## Teacher development

Among the many factors influencing education quality, teachers are widely recognized as a critical factor. It is the common understanding that, worldwide, the teachers are required to be more pro-active and competent to carry out more significant teaching learning activities for better student achievements. For addressing this concern teacher development has a greater importance (Lamichhane, S. R. Siksha Magazine, 2008).

Since its establishment, The National Centre for Educational Development (NCED) is working continuously for the improvement of teacher performance through their professional development by providing 10 month teachers' training course. It is said that all qualified teachers in public school have received 10 months training provided by NCED. But the question is: after the completion of a 10 month teachers training program, has there been any significant changes in the teacher development? To answer this pertinent question, teacher development has been considered as one of the major themes under the study of "contribution of teacher training programs to primary education development in Nepal". Teacher development in this context implies the professional development of an individual teacher including many other aspects in which teacher has a stake.

Teacher development is a related process. It includes teacher capacity/competency for enhancing teaching learning process as well as covers activities which bring growth of their own personality, help them in their progress towards maturity & actualization of their potential capacity.

### **Teacher competence**

Teacher competence is one of the major components of teacher development. It has been recognized as an important component of teaching-learning process. Within this context, it is not possible for our teachers to fulfill their obligations without identifying their "professional competencies". Thus, several literatures were reviewed to trace out the major competencies required for teachers. There are many related terms used for teacher competence such as 'effective teacher', 'successful teacher', 'teaching efficiency', 'teacher performance' teacher capacity and teacher competency etc. Meaning wise, Cambridge online dictionary defines competency as "Ability to do something well". In that sense, it is the ability of teacher to facilitate teaching-learning process by applying their professional knowledge, skills and attributes to their specific teaching context.

However, the components of teacher competence are described differently in different literature. One describes teacher competence into four domains such as teachers' ability in terms of "planning and preparation", "maintaining the classroom environment", "instruction" and "professional responsibilities" (Danielson, 1996). Whereas, other describes three core competencies including six generic competencies such as teachers ability in terms of "lesson preparation", "teacher-student interaction" and "after-lesson tasks" as core competencies and "personal and professional values-professional development", "knowing the student", "learning and teaching process", "monitoring and evaluation of learning and development", "school-family and society relationships", "knowledge of curriculum and content" as generic competencies. Similarly, Department of Education and Training (DET), Australia categorize teacher competencies into five dimensions. Dimension 1 describes the complex task of teaching and learning. It outlines how teachers plan, develop, manage and apply a variety of teaching strategies to support quality student learning. Dimension 2 describes how teachers monitor, assess record and report student learning. Dimension 3 describes how teachers manage their own professional learning and contribute to the professional learning of their colleagues. Dimension 4 describes how teachers participate in the development and

management of curriculum policy in their particular school environment. And dimension 5 describes how teachers build, facilitate and maintain working relationships with students, colleagues, parents and other caregivers to enhance student learning (DET, 2004).

Out of many dimensions of teacher competence, five dimensions were considered in this study. They were teachers' ability in terms of "preparation", "presentation", "assessment and feedback", "concluding the lesson" and "ability of using learning transfer strategies". Under each dimensions several performance behaviors were listed. Incorporating these dimensions and performance behaviors, the specific observation tool was developed to assess teacher competence. It is a hard fact that the only way to assess teacher competence is to observe teachers at work, in the school. Class observation offers a direct means of doing this. Thus, teachers were observed for the complete class by the field researcher who was also trained for the classroom observation. During the classroom observation, four major issues were addressed. Those were:

- What is expected of teachers? (requirement)
- What evidence would a teacher have to demonstrate? (performance indicator)
- How well did the teacher demonstrate this? (quality)

In total, one hundred seventeen teachers were assessed for their performance in the sampled schools. Although there were few drawbacks in the performance of few teachers, their talking style and speech proved that there is a change in their attitudes and practices as a result of teachers training. Many of them know their subject matter, used appropriate teaching method as per content, create and sustain an effective learning environment, were committed to teaching and cared about their students. Table below presents the overall findings.

Table 20: Observed behaviors of trained teachers

S. No.	Behavior	Performance ratings in percentage	
		Below average	Above average
<b>1.</b>	<b>Preparation ability</b>		
	<ul style="list-style-type: none"> <li>• Lesson plan is available</li> <li>• Resources are available</li> <li>• Facilities are arranged</li> </ul>	58	52
<b>2.</b>	<b>Presentation ability</b>		
2.a	<b>Platform skills (voice, body language)</b> <ul style="list-style-type: none"> <li>• Eye contact is equal</li> <li>• Gestures are non-distracting</li> <li>• Voice is clear and audible</li> <li>• Words used are clear and understandable</li> </ul>	18	82
2.b	<b>Content</b> <ul style="list-style-type: none"> <li>• Materials are relevant with the topic</li> <li>• Materials are presented sequentially</li> <li>• Examples are provided for clarity of information</li> <li>• Information is repeated for the slow learners</li> </ul>	35.4	64.6

2.c	<b><i>Delivery</i></b> <ul style="list-style-type: none"> <li>• Expected behavior (learning outcome) is displayed/communicated</li> <li>• Varieties of methods are used (group work, individual work, pair work etc.)</li> <li>• Methods match with content</li> <li>• Learners are actively involved</li> <li>• Learners are involved fairly in terms of their caste, gender, religion, economic status etc.</li> </ul>	30.3	69.7
2.d	<b><i>Resources/materials</i></b> <ul style="list-style-type: none"> <li>• Subject specific materials are used</li> <li>• Locally available materials are used to prepare visuals</li> <li>• Resources add to the learning experience (based on learning outcome)</li> <li>• Resources are used proficiently</li> </ul>	48.5	51.5
2.e	<b><i>Interaction with learners</i></b> <ul style="list-style-type: none"> <li>• Learners name used</li> <li>• Questions are frequently asked</li> <li>• Learners questions are answered with encouraging feedback</li> </ul>	66.6	33.4
<b>3.</b>	<b>Assessment and feedback</b>		
	<ul style="list-style-type: none"> <li>• Learners are assessed for level of understanding</li> <li>• Encouragement and developmental feedback is provided</li> <li>• Teacher moves among learners</li> </ul>	69.5	30.5
<b>4.</b>	<b>Concluding the lesson</b>		
	<ul style="list-style-type: none"> <li>• Content and objectives reviewed</li> <li>• Class ends on time</li> </ul>	35.7	64.3
<b>5.</b>	<b>Learning transfer strategies</b>		
	<ul style="list-style-type: none"> <li>• Homework is provided with proper direction</li> <li>• Project work is given with proper direction</li> <li>• Practice opportunities are provided where needed</li> </ul>	39.7	60.3

It is evident from the above table that the majority of the teachers have performed above average in the listed competencies such as platform skills (82%), selection of content (64.6%) delivery (69.7%), concluding the lessons (64.3%) and using transfer strategies (60.3%). However, still many teachers have performed below average in few competencies such as

preparation ability (58%) interaction with learners (66.6%) and assessment and feedback to learners (69.6%). The below average performance indicates that there might be no or low opportunity for feedback to teachers after they have been trained. Teachers self reporting through questionnaire and FGD data also support this as a limitation of teacher training.

### ***Teacher qualification and teachers competency***

Teacher qualification is considered as a factor that may influence the performance of teacher. When analyzing the competencies in relation to teachers' qualification, there is no correlation between teachers' qualification and their performance in terms of identified competence (See annex XVI for the details).

### ***Gender and teacher competency***

Does gender makes difference in the performance? The question is answered through analysis of teacher's performance in terms of their gender. However, again there is no significant difference between male and female teachers' performance (see annex XVII for the details).

Besides this, drawing from the qualitative information from focus group discussions and questionnaire, it is found out that teachers are satisfied with their performance and claimed their learning enhancement after the teachers' training. Not limiting to their enhanced learning but are able to facilitate transfer of learnt skills/knowledge in their workplace, their school. These are the statements given by teachers regarding their performance improvement.

*"We had not known the pedagogical knowledge for teaching and learning activities but training has given us foundation knowledge for our profession": teacher, Dolakha*  
*"We realized the value of local low-cost and no cost materials. We play games even in mathematics and social studies"- Mr Shrestha, Shree Gyan Mandir Namuna Higher Secondary School, Sindhupalchowk*

*"Among all the contribution made by that 10 months training, a considerable thing we learned is to make the unit plan and daily lesson plan". Focus Group Discussion with teachers, Sindhupalchok*

*"Previously we used to be fully dependent on books, but now I am clear about the objectives and contents of teaching" Mrs. Rijal, Panchthar*

One of the example statements from head teacher of Shree Rastriya Shambhu Sharan Ma. Vi. Bardiya, also supports that teachers have developed self efficacy because of ten months training. Below is the statement from the head teacher.

*"There are teaching materials in school, teachers are preparing those materials, teaching and learning activities are transparent, teachers are creative, they involve students in group, we are testing teaching learning activities of the students, teachers are developing their abilities and capabilities, teachers are responsible after the training, provision of training in school managed for teachers, involvement of teachers in policy making, proper regular supervision helping teachers according to their requirement" Head teacher, Shree Nepal Rastriya Shambhu Sharan Ma. Vi. Bardiya*

On the other side of the coin, it is pity that few teachers are not happy with their job and do not care about the performance. Mostly, they do not enjoy teaching because they themselves hate the profession and do not encourage junior to join this kind of profession in future.

While talking to teacher about their professional development during FGD in one of the school, few teachers said like this:

*"Teaching is just as survival profession", parents and public think teachers are in school to spend their time and to get salary, and some of them think teachers are in this profession because of their incompetence"*

It is not only the parents and public but in many cases, school authorities do not have any specific programs to encourage teachers to transfer their learning in the school. The statement below proves that teacher though encouraged to perform better with new knowledge and skills there is no facilitations from the school side. Look at the excerpt below:

*“Sir, I have been teaching since last two decades, over this time, hardly I’m able to transfer my knowledge in the classroom. The course I received is already old. Now, I think, basic refreshment and practice training on due course are needed but who will be the responsible to conduct it. I know, training is considered only for the promotion not as a part of skill development”. Teacher, Baglung*

### **Subject knowledge and use of textbook and curricula**

The results concerning teachers understanding of subject knowledge is seem to be improved among trained teachers. Many of them expressed that they have a better understanding of subject matter. Many of them reported that they refer school curricula and textbooks both because of which they are aware of what they supposed to teach. Not only this, they can even point out the match and mismatch between these two. This information is clearer when data gathered through focus group discussion is reviewed. It is not only teachers who are claiming this, but also the SMC/PTA members as well as parents who were consulted during focus group discussions have remarked that teachers have a better knowledge of subject matters compare to previous years when they were not trained. The Following table created on the basis of FGD information indicates this.

Table 21: Region wise responses retrieved from several sources during FGD

<b>Mountain</b>			
<b><i>Responses</i></b>	<b><i>Teacher/head teacher</i></b>	<b><i>SMC/PTA</i></b>	<b><i>DEO/RPs</i></b>
Better use of text books and curricula	3 FGD (34 participants)	1 FGD (9 participants)	--
Study habit improved	2 FGD (17 participants)	1 FGD (9 participants)	--
<b>Hills</b>			
<b><i>Responses</i></b>	<b><i>Teacher/head teacher</i></b>	<b><i>SMC/PTA</i></b>	<b><i>DEO/RPs</i></b>
Better use of text books and curricula	3 FGD (31 participants)	1 FGD (11 participants)	3 FGD (17 participants)
Study habit improved	4 FGD (33 participants)	--	2 FGD (11 participants)
<b>Terai</b>			
<b><i>Responses</i></b>	<b><i>Teacher/head teacher</i></b>	<b><i>SMC/PTA</i></b>	<b><i>DEO/RPs</i></b>
Better use of text books and curricula	5 FGD (41 participants)	--	1 FGD (6 participants)
Study habit improved	3 FGD (31 participants)	--	1 FGD (6 participants)

The table above shows that there is a general consensus between SMC/PTA members, teacher/head teacher and DEO/RPs about teachers improved capacity regarding use of

textbook and curricula as well as increased study habits. It gives the impression that trained teachers are more professional in terms of study habits and using textbook and curricula than before.

### **Better understanding of students**

Understanding own student is one of the quality of teacher. The effective teacher knows all the characteristics, interests and needs of the student, understands the socio-cultural and economic background of the student and his/her parents. This study revealed that trained teacher seemed to place more concern towards students. They were talking about students excelling because of their help and support and it is possible only due to their experiences gained during training. Teachers repeatedly said statements as well as reflection from parents, DEO and students reveal that this was true.

*“Teacher became more positive towards student”; SMC/PTA members and teachers/head teachers in the schools in hilly region as well as in Terai region.*

*“Teachers love us”, students in Terai school*

*“Teachers learnt to praise students”, DEO, Terai region*

To supplement the above reflections, these are few instances excerpted from the discussions:

*“No anger should be shown in front of the children. Making noise is their nature. If they feel something easy and enjoyable, they like to participate in it very soon. We need to understand their passion, curiosity and motivation and allow them to work. If they are satisfied then there will be learning”. teacher, Mustang*

*“Why to scold.... a poor fellow..... he does not have any guidance at home... if got opportunity, he can do better”, teacher, Panchthar*

### **Collegiality and collaborative culture among teachers**

It is not only the teacher competence which is required for better teaching learning. It would be great if teacher develop collegiality and collaborative culture among themselves. This study revealed that there is an improvement in teacher collegiality and collaborative culture in the school. The table below indicates few repeatedly said statements in FGD:

Table 22: Region wise responses retrieved from several sources during FGD

<b>Mountain</b>			
<b>Responses</b>	<b>Teacher/head teacher</b>	<b>SMC/PTA</b>	<b>DEO/RPs</b>
Teacher cooperation increased	1 FGD (9 participants)	1 FGD (9 participants)	--
Team work improved among teachers	2 FGD (17 participants)	1 FGD (9 participants)	--
<b>Hills</b>			
<b>Responses</b>	<b>Teacher/head teacher</b>	<b>SMC/PTA</b>	<b>DEO/RPs</b>
Teacher cooperation increased	9 FGD (65 participants)	--	1 FGD (6 participants)
Team work improved among teachers	2 FGD (17 participants)	--	--
<b>Terai</b>			
<b>Responses</b>	<b>Teacher/head</b>	<b>SMC/PTA</b>	<b>DEO/RPs</b>

	<i>teacher</i>		
Teacher cooperation increased	3 FGD (31 participants)	--	1 FGD (6 participants)
Team work improved among teachers	3 FGD (31 participants)	--	1 FGD (6 participants)

The table above indicates that there is a general consensus among teachers/ head teachers, SMC/PTA and DEO/RPs from all three regions. Their remarks suggest that teacher's professionalism is increased in terms of collegiality due to training. Besides these, one of the instances below from head teacher also support that there is an improvement in teacher collegiality and collaborative culture among teachers.

*“Teacher collaborates to conduct functions; they also take over the classes in leisure. They have prepared the routine together; they share news and information and consult in decision making. Overall, we have a good cooperation, except sometimes in political issues. Sometime, political inclination of teachers has affected in the team-spirit of the system”. Head teacher, Panchthar.*

### **Conclusions**

Teacher development is considered as the most important factor for maintaining quality of education. This study suggests that after the ten months teacher training, there is a significant improvement in teachers' competency. Classroom observations made in selected schools in Nepal based on the listed competencies for teachers have proved that teachers have improved their classroom practices. As teacher development is not only the classroom practices and rather include other professional development components such as understanding of individuality of students and maintaining teachers collegiality in the schools for better quality education. This research suggests that trained teachers are better in maintaining teacher collegiality among them as well as they are better in understanding students than before. However, some of the criticisms on the side of teacher development and some of the dissatisfactions expressed by teachers are few pertinent issues which can provide important insights for necessary reform in teacher training. Accomplished teachers make a difference in student's learning. Thus, any attempt to establish professional teacher competencies must be firmly grounded in accurate and comprehensive understanding of evolving nature of the work of teachers. The identification of such competencies in advance before providing training would definitely help teacher to perform better as per the identified competencies. Similarly, regular monitoring and feedback to identify strengths and weakness of teachers' performance and providing remedial solutions on time also would help in maintaining their performance as per the standard competence.

## Overall school development

The purpose of this research is to study the effectiveness of primary teacher training on different facet of teaching learning process in schools in Nepal. Almost all countries in the world have teacher preparation system according to their requirements. Some are found very effective and some are struggling to meet the purpose depending upon the countries' level of modernization and available resources. Training has been both arts, and science and technology because of use of technology, and output is human performance change.

Making a transition from non effective performance to performance focus requires an individual to develop knowledge, skills and attitudes needed to systematically solve the performance problem. Training is considered as one of the effective tools to improve the performance problem if it is related to knowledge skills and attitudes. Hence, only training does not solve the performance problem which needs wider area diagnostic approach to tackle the problem as it surfaces. The areas that should be covered to improve the situation include environment, incentives and motivation and, of course, training relating to performance problems.

Moreover, paradigm has begun to shift dramatically on accountabilities of training. Organizations have begun to shift activities-based (number of participants, number of events, number of equipment utilized) to results-based evaluation (value of a program to organization).

School as an institutional development signifies the overall development of education system of particular countries. The number of schools in Nepal increased dramatically in last four decades. The number raised from .....primary and secondary

### Findings

Children require stimulating and supportive environments to develop. Personal, family, home, learning environments are all important for child development. When children lack a positive environment in which to learn and grow they become vulnerable and often need extra support. Any attributes that needs attention for children to learn and grow are considered as the factors regarding overall school development.

The lists on the following tables indicate the attributes which were identified as the out put of the research questionnaire intended for teachers and head-teachers. The list indicates various things as the attributes of overall school development and few are mentioned in elaborative manner.

Table 23: List of overall school development attributes as the response to research questionnaire for teachers/head teachers.

SN	Items	Head teachers questionnaire	Teacher questionnaire
1.	Co-curricular activities	4	3, 13
2.	Meeting and discussion with parents	4,6,7,13, (15)	3, 6, 8, 13
3.	Meeting and discussion with stakeholders	4	3, 12
4.	Welcome to school program	6	
5.	Competition in group work	7	8
6.	Internal Discussion	18, 11	3, 5, 12
7.	Means of communication (meeting, telephone,	11.1	(4)

	correspondence, radio, follow up, newspaper)		
8.	Collection of household data	11.1	
9.	Five years plan	12	
10.	Planning in school development program	12, 14	
11.	Strategic co-education	12	
12.	Planning for changing the uniform	12	
13.	Library management	12	12
14.	Class promotion	12	
15.	English medium school	12	10
16.	Distribution of responsibilities	12	
17.	Conducted follow up	12	3, (4)
18.	Provision of rewards	13	8, 13, 13.2
19.	Workload of teachers	13.2, 14.1	13.2
20.	Manage substitute teacher	13.2, 14.1	14
21.	Irregularity in studies	13.2, 15	
22.	Lack of educational materials	13.2	4
23.	Lack of time	13.2, 14.1	13.2, (4)
24.	Not contextual	13.2	
25.	The ratio of teacher is comparatively less	13.2, 15	4, 13.2
26.	Interest of stakeholders increased	14	
27.	Development in physical infrastructure	12, 14	5, 12, 14
28.	Expectation of foreign aid	12	
29.	Disturbance due to banda and strike	12	
30.	Lack of performance after training	13.2	
31.	Due to substitute teachers course couldn't finish on time	14.1	14.1
32.	Financially not sound	14.1,15	12
33.	Due to new curriculum	15	
34.	Lack of coordination	15	
35.	The central should monitor school to strictly transfer the knowledge and skills	17	
36.	Need of training to parents and school management team	17	
37.	Cleanness of school, classroom and individual		3
38.	Need of Teachers guidelines		4
39.	Lack of classroom to demonstrate educational material	5	14
40.	Lack of secure room unable to manage educational materials	5	14
41.	No feedback from management committee		14
42.	Advice and cooperation	5	5
43.	Give feedback	5	
44.	Supervision of class	5	5
45.	Sending in training	5	

46.	Management of classroom		6
47.	Scholarship		8
48.	Provide lunch		8
49.	Good coordination in between school and management		10
50.	School management		12
51.	Distribution of tie and belt to students		12
52.	Development of club and organization		12
53.	Cleanness committee and organization		12
54.	Monitoring of students		12
55.	Administration		12

56.	Primary school in-charge		12
57.	Computer operator		12
58.	जुनियर रेडक्रस सर्कलको सहशिक्षक नायक		12
59.	House captain		12
60.	Electrical technician		12
61.	First Aid		12
62.	Resource management		12
63.	Prepare educational materials		12
64.	Representation of teacher in school management committee		12
65.	Supervisor for children club		12
66.	Gardener		12
67.	Computer work		12
68.	Scout		12
69.	Provision of reward and award		13
70.	Illiterate community		13.2
71.	Unable to fulfill teachers' most of demands		13.2
72.	Unmanaged school		13.2
73.	No change after training		14.1
74.	Lack of evaluation		14.1
75.	Lack of teachers' vacant position		14.1
76.	Lack of refresher training		14.1
77.	Weakness of administration		14.1
78.	Improvement in education quality		16

Note: Number in parenthesis indicates negative development responses

The followings subheadings are clearly indicated in Focused Group Discussions (FGD) and verified by researchers' observations, teachers and head teachers interview questionnaire.

### **Personnel Hygiene and Sanitation**

Personnel hygiene and tidiness of school surroundings has been the concern for school administration and teacher in context of school system in Nepal. Significant improvements have been noticed during this research.

Teachers in mountain responded with the sanitation in school has been improved significantly and this is true in case of teacher's response both in hills and Terai.

FCD in all three regions have responded with positive indications regarding sanitation and personnel hygiene of the schools and students respectively.

### **Interactions between students and teachers**

One of the objectives of ten months teacher training is to create and maintain in the class room as well as in the school a learning environment which is interesting, enjoyable and stimulating (Curriculum, 2002). As long as the teacher and students do not come together, the learning environment can not boost up. The interactions between teachers and students are the key environmental factor to raise both efficiency and effectiveness of teaching learning process.

The evidences of such phenomenon appeared quite significantly on this study. The interaction between teachers and students increased significantly and increment on participation of students in teaching learning process has been expressed by teachers in all three regions.

### **Participation of communities in school management**

Focused group discussion has indicated that community's participation and also resource mobilization on school improvement has been noticed because of HT training. The FGD revealed that visiting schools even class rooms by SMC members has begun to take place wiping out the concern of transparencies and feed backs.

### **Active participation in SMC**

The participation and contribution to schools through SMC by the community including SMC members has been increased. This can be noticed in all FGD and

### **Management and Leadership of Head Teacher**

Focused Group Discussion (FGD) has expressed head teachers have been cooperative, school administration including delegation of authorities and responsibilities have been improved, and also community relation has been better since head teachers' training program has been implemented. As the curriculum of head teachers includes teacher management as one of the objectives of HT training:

Table 24: Overall School Development Attributes on Researcher's Reflection

<b>Activities</b>	<b>Hill</b>	<b>Mountain</b>	<b>Terai</b>	<b>Valley</b>	<b>Overall Total</b>
Co-curricular Activities	12	2	3	0	17
Planned Teaching	6	2	2	0	10
Use of Educational Materials	8	2	5	1	16
Study Tour	2	0	0	0	2
Classroom Management	8	1	2	0	11
Improved Teaching Methods	8	0	8	0	16
Participation in Refresher Training	11	2	11	1	25
Awareness on Gender Equality	9	1	4	0	14
Scholarship	5	0	6	0	11
Free Lunch	0	0	1	0	1
Discussion with Parents	13	2	5	1	21
Provision of Rewards	3	0	0	1	4
Feedback	1	0	0	1	2
Awareness on Class Regularity	7	1	7	0	15
Welcome to School Awareness	9	1	4	0	14
Monitoring	3	1	0	1	5
Support to Weaker Students	5	0	3	0	8

### **Planning, monitoring and record keeping**

One of the objectives of ten months teacher training is to keep school record appropriately (Curriculum, 2002). The study tried to explore the evidences on both process and product of the objectives mentioned. To the response on teacher questionnaire 6, monitoring to students by the teachers has been noticed with larger frequencies. Similarly FGD also has indicated that record and administrative procedures has been increased noticeably. However, in multi-tiers schools the FGD indicated that head teacher has been less attentive to primary wing.

### **Co-curricular Activities**

Co-curricular a relatively new term instead of Extra-curricular (Mohanty, 2003) as the personality development of children has been found reasonably well grounded in school context. The facets included physiological, ethical, academic, social, civic, aesthetic, cultural, recreational and discipline. The various types of these facets have been reported by the researcher in all aspects of researches as FGD, Researcher reflection, teachers and head teachers interview.

#### ***Dancing Class***

*Mero nam Jyamire*

*Jamuni ko Choro Ma.....*

*(Choir with rhythm) in class room of Dailekh*

*Mrs Tham Maya Magar (name changed) teacher in primary school in Dailekh district of Nepal appeared in jolly mood with her dancing attire in Friday afternoon with a group of grade one students. Some of the students were in dancing attire and some were with blue school uniform. Teacher was so enthusiastic and source of motivation to the students that they were more than eager to perform as directed and demonstrated by teacher herself. When asked about the performance on dancing by the student the teacher replied that after some years in future they would appear in national arena.*

Teacher response based on the questionnaire 6 indicates that ETC 27 and non ETC 16 frequencies (Table 1) are found indicating significance of teacher training on planning and implementing Co-curricular activities in schools. FGD with both groups Teacher/Head Teachers and SMC/PTA also have strong indications with significance frequencies regarding the planning and implementation of Co-curricular activities which has been improved since the teachers were trained. This is substantiated by the case study (Dailekh) teacher was dancing with the students with the rhyme sung together. Further it reveals that activities like contest debate, cultural program were organized during various local and national festivals.

### **Attitudes towards training**

It was strong noticeable things to find in this research that teachers/head teachers were keen to learn through refresher training. This is positive attitude and belief of teachers/head teachers that training can bring difference in school education. The highest response numbering 25 was found on researchers' reflection regarding refreshment of teacher training.

Table 25: Teacher Interview Questionnaire 6

Count of code		theme_name					Grand Total
etc_non_etc	answer_1	M&E	Various Activities	Support	Public Awareness	(blank)	
ETC	Activities		27				27
	Planned Teaching		21				21
	Use of Educational Materials		19				19
	Study Tour		6				6
	Classroom Management		4				4
	Improved Teaching Methods		3				3
	Participation in Refresher Training		1				1
	Awareness on Gender Equality					1	1
	Scholarship				3		3
	Free Lunch				2		2
	Discussion with Parents					12	12
	Provision of Rewards				26		26
	Feedback		11				11
	Awareness on Class Regularity					1	1
	Welcome to School Awareness					3	3
Monitoring		13				13	
ETC Total		24	81	31	17		153
Non-Etc	Activities		16				16
	Planned Teaching		7				7
	Use of Educational Materials		13				13
	Study Tour		1				1
	Classroom Management		4				4
	Improved Teaching Methods		11				11
	Scholarship				2		2
	Discussion with Parents					7	7
	Provision of Rewards				20		20
	Feedback		7				7
	Awareness on Class Regularity					1	1
	Welcome to School Awareness					5	5
	Monitoring		7				7
Support to Weaker Students				1		1	
Non-Etc Total		14	52	23	13		102
(blank)	(blank)						
(blank) Total							
Grand Total		38	133	54	30		255

### **School Image**

The image of school has begun to rise as students from private boarding school begin to come back in public schools after the performance of teachers with training. The researcher did not notice any other reasons for the return of the students from private school to public school including financial constraints.

*Shyam KC (name changed) a student of grade two has returned to public school after spending three years in private school. He is smart and doing good in class. When asked why he came to public school after spending so many years in nearby private school. He replied that every things in this school are better than the private school so my father decided to send me in this school. Replying the quarry he was assertive on performance of the school in all respects.*

### **Increased parents Involvement**

The following table indicates that noticeable number response from the teachers shows that hills, mountain, and Terai schools with frequency 15, 4, and 10. Discussion with parents. There are many factors involved in increasing and maintaining successful academic achievements for all students. Statistics show, that children spend only 9 % of their time at school compared to the 91 % of their time they spent of school from birth to 18 years of age (Will, 1997). Because of these small times in schools, it is essential that involvement of parents plays significant role on children's education and deserves more attention for primary school children. Desimone states that practices and behaviors that can make positive differences in academic achievement are authoritative parenting, high expectations, parent teacher communication, parental assistance at home and parent school interaction (Desimone, 1999).

## Summary of the findings

### Description, major findings, bottlenecks and opportunities

Based on the reflections drawn from various field related findings on respective themes, a tale is presented below describing the overall findings in a nutshell:

Table 26: Contribution of teacher training in a nutshell

Theme	Description	Major Findings	Bottlenecks	Opportunities
Quality	Contribution towards the improvements in teaching, learning and performance, teacher variables, students' learning, stakeholders reactions	Improved teacher-student relations, students involved in learning, more project works, increase in motivation to learn and succeed, varieties of teaching methods used by teachers, better results, improved objectivity in assessments.	Lack of accountability, more experienced teachers contributing less to quality improvement, same training for all, training taken as a formality, training taken as a means to promotion.	More training opportunities for new teachers, proper training needs assessment, shorter duration training events, link use of training to performance appraisal.
Access	Enrolment rates, retention rates, reduced educational wastage, affordability, all families/communities send their children to schools, easy admission, education for all.	GPI has been improved in terms of enrollment, repetition, promotion, and dropouts, increasing rate of female students in primary grades; underprivileged, backward, dalits and deprived communities are encouraged to send their children to schools, teachers are supportive, some teachers became instrumental to improve school community relations.	Almost all students promoted due to liberal pass policy, continuous assessment not done and/or not recorded properly, schools do not keep household record of their service area, too much is expected from trained teachers about access.	Systematize continuous assessment, provide counseling to students (and parents) in trouble, include ways of improving 'access' in the content of teacher training curricula.
Equity	Teacher-student behaviors, non-discrimination, fair treatment, non-violent teaching learning,	Training has contributed to ensure equity in education, most school age children are found enrolled at schools, teacher's behavior is found largely non-discriminating, reduced corporal punishment, schools welcome students from all castes, tribes, communities...	Schools unevenly represent community population, inadequate efforts to create child friendly environment in schools.	Assist students with learning disabilities, promote equity through teacher behavior in classroom environment, provide counseling to students through teachers.

Efficiency	Student learning achievement (gain score) in core subjects, grade promotion, retention, repetition, teacher effectiveness.	There is indeed an increment in the learning achievement, gain score is discernible in English and Math, increased rate of retention, pass rate increased, dropout decreased, teachers' time on task increased.	Government funded school teachers consider themselves as government employees, decreasing sense of ownership and belongingness, need for increasing efficiency not realized, baseline data and benchmarks not available.	Induction of teacher accountability measures, reward and punishment, distinction between good and bad performance, mechanism to recognize good work done by teacher/s, principal/s.
Teacher development	Classroom practices, teacher competencies, self-efficacy, teachers' ability/willingness to perform, use of text books and curricula, study habits, student relations.	Teacher collegiality has improved, trained teachers learn and try new things, study habits improved, trained teachers make better use of text books and curricula, child-friendly teaching.	Lack of monitoring and evaluation, missing updates and refresher courses, good performance not rewarded, bad performance not punished, career progression not linked with training and on-the-job performance.	Link value of training to performance on the job, provide for refresher courses built upon the previous training taken by teachers, link teacher training outcome with level of students' performance.
Overall school development	Contribution to school image, community relations, school health and hygiene, support to head teachers, co-curricular activities, record keeping and archival.	Trained teachers are found contributing to school image and community relations, they are supportive to SMC and head teachers, accept non-teaching assignments and maintain better record keeping at schools.	Stakeholders not adequately involved, standards of 'good schools' not communicated, blanket rules, performance indicators unavailable, value added by individual efforts and initiations not adequately recognized, politics all over.	Devise school performance indicators and mechanisms to involve stakeholders, accountability measures, discourage school politics, reward and recognize good performance publicly.

## **CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS**

### **Overall Conclusions**

Teacher training helped building teacher confidence through additional knowledge and skills learned. However, the application of training program has yet to demonstrate specific impact on teaching and learning.

Teachers are increasingly involved in the process of increasing access to education. A gradual increase in enrollment is quite easily discernible however, due to the saturation of student enrollment in schools, significant increases are not apparently seen in the data records of over the last five years.

There is humble effort made by trained teachers in ensuring equity in all aspects of school education by motivating parents, students and local community.

Students learning achievement has shown a gradual increase over the years. However, substantial contributions of teacher training towards improving systemic efficiency was not observed.

Teacher training has substantially contributed to increase teacher efficacy, collegiality and professional growth of teachers.

Trained teachers have contributed to improve positive public image of schools. The interactions between student and teachers have increased significantly including co-curricular activities in schools. Personal hygiene and sanitation improved. Participation of communities in school management has been influenced by trained teachers.

### **Thematic Conclusions and recommendations**

#### **Quality**

##### **Teacher Quality**

Teacher quality is considered as the most important factor having higher impact on student achievement yet what attribute(s) count as teacher quality remains ambiguous. However, the situation assessed in schools in Nepal based on the teacher attributes such as experience, qualification, preparation and certification reveals quite promising results in public schools. Most teachers are experienced with over 5 years already in the teaching. Quite a number of teachers have even over 25 years of teaching experience. Likewise, all teachers have minimum prescribed qualification for teaching and some have even higher qualifications up to master's level. Similarly, all teachers have acquired the prescribed teacher training course and some are in the process of completing it. Finally, certifications have been made mandatory to all teachers and as such teachers have been acquiring the certification within the given time frame.

Thus, on the basis of these teacher attributes quality of teachers in Nepal can be considered of a high quality.

#### **Recommendations**

Studies suggest that teacher experience is not a very strong predictor of student's learning achievement and that its impact also levels off after five years of experience. What is

intriguing to note that over 11 percent of the teachers have over 25 years of experience which prompts to investigating an interest area whether years of experience reaches a level of maturity with diminishing returns beyond any point? It is therefore recommended to constitute a study on teacher experience and student learning achievement. The concern is that teachers with over 25 years in teaching may need extra support to keep abreast with evolving classroom culture, technology, and pedagogical discourse.

Recent trends in meeting the challenge of placing qualified teacher in every classroom has led the governments strengthen traditional teacher-preparation programs and developing systems to hold those programs accountable. *Quality Counts 2004* (Education Week, 2004) shows that 12 states, in the US, have taken their accountability systems a step further by holding their teacher-training programs accountable for the performance of their graduates in a classroom setting. In the same spirit, it is recommended that the MOE/NCED take a similar step in making institutions accountable for the performance of their graduates in the classroom.

## **Access**

### Conclusions

As to the contribution of teacher training towards the increased access of non-schooled children in school, this study found contradictory responses. The qualitative information and the selected cases helped understand that teacher training has certainly contributed to improve access of the marginalized community children in school. However, the analysis of quantitative data did not support this finding. This shows that stakeholders perceived the importance of teacher training for increasing the access of marginalized children in education but they did not keep the log that the trained teachers did it. Claims and evidences mismatch.

### Recommendations

Despite positive impressions among stakeholders, this study could not establish the fact that teacher training contributes to access, equity, and efficiency in education. This finding demands that the intent of teacher training should be reviewed and changed to suit the expectations of the trainee-teachers after the completion of their training. Currently, expectations implied with teacher training are more ambitious than the level of post-training self-efficacy of the trained teachers.

With few exceptions, teacher and all stakeholders of education have acknowledged the importance of teacher training. Following this acknowledgement, teacher training providers should develop a form to obtain through individual schools, their intended contents and methods to be incorporated in the teacher training modules. Materials thus collected should be analyzed at the resource center level and be compiled at the national level for the necessary revision in the teacher training curricula. This approach will constitute a comprehensive needs assessment for training.

## **Equity**

### Conclusions

As to the contribution of teacher training for ensuring equity in education this study found that teachers were better aware of the classroom diversities and pluralism. They had well identified some of the diversities as well and also made efforts to address them fairly well. This study also showed that the trained teachers were not assertive enough as intended in the teacher training packages and internship component of the training.

### Recommendations

Since every stakeholder is interested to know the difference between the behaviors of the trained and the untrained teachers, it is worthwhile to keep log on teachers' initiatives and

demonstrated behaviors in the school's context. For increased ownership of the process and outcome, such work-log could be prepared in consultation with teachers themselves, teachers unions and SMC/PTAs and be distributed to the teachers for their record keeping purpose. Researchers could cross check the findings of the log and prepare report for wider consumption.

Teacher development demands collegiality and the trained teachers were found gearing towards it. This finding requires on going support to the trained teachers for their strengthened collegiality. Provision of reward and punishment to teams of trained teachers could help improve teacher collegiality for increased performance.

## **Efficiency**

### **Conclusions**

Teacher effectiveness assessed in terms of learning achievements appears to have most positive results. Students score in tough subjects like Math and English was found to have improved significantly compared to the other two subjects. Teachers, students, SMC, and the DEOs interviewed about teacher quality and effectiveness also acknowledged the fact there is an improvement in learning achievement among students.

The factors contributing to increased student achievement appears to be associated with teacher training program as teachers have “used different teaching methods in the classroom”, “there's an increased teacher student interactions”, and have “used child centered learning approach”. These attributes were results of the teacher training programs. However, on the part of internal efficiency indicators there is not much to attribute to teacher training program as the results are not much encouraging. It could be argued that teacher quality is although an important condition but is not a sufficient condition for improving internal efficiency in education.

In countries like Nepal, poverty and survival related chore appears to eclipse efforts made in education. There appears to be prominent reasons other than teacher quality that has been the cause of low internal efficiency in education system in Nepal.

### **Recommendations**

Teachers in Nepal have the minimum required quality. The impact of quality teachers on learning achievement and improved school performance usually depends on other factors such as teacher motivation, school environment, and student and parents motivations. Likewise, improving internal efficiency is also linked with so many external factors. Teacher quality in Nepal is of a good quality therefore the recommendation is to exploring other factors that stand as obstacles in achieving efficiency in education system.

## **Teacher development**

### **Conclusions**

Teacher development is considered as the most important factor for maintaining quality of education. This study suggests that after the ten months teacher training, there is a significant improvement in teachers' self efficacy. Classroom observations done in selected schools in Nepal based on the listed competencies for teachers have proved that teachers have improved their classroom practices. There are significant numbers of teachers performing above average in their platform skills (82%), selection of content (64.6%) delivery of lessons (69.7%), concluding the lessons (64.3%) and using transfer strategies (60.3%). It is further supported by qualitative information such as teachers' efficiency to use textbook and curricula, being aware of own professional development through increment in study habits are few more examples.

## **Recommendations**

Teacher development is not only the classroom practices but it also include other professional development components such as understanding of individuality of students and maintaining teachers collegiality in the schools for better quality education. This research suggests that trained teachers are better in maintaining teacher collegiality among them as well as they are better in understanding students than before.

Findings indicate that trained teachers working with head teachers who are trained in school management are better performing both teaching and non-teaching assignments. To encourage their initiatives for school development and improved community relations, head teacher training should also be revised by incorporating behaviors that could enhance possible contribution of teacher training to different aspects of quality education. However, some of the criticisms on the side of teacher development and some of the dissatisfactions expressed by teachers are few pertinent issues which can provide important insights for necessary reform in teacher training.

## **Overall school development**

### **Conclusions**

Overall development of school in the context of the research is institutional development of the school widening and intensifying the role of stakeholders in instructional development process. In the past school was considered as the entity of the government and with the limited porosity in the community. But through teacher training and other social educational development has contributed to demand more porosity in school system. As a result various other activities associated with teaching learning process began to happen in the schools. The contribution of teacher trainings remained significant as many teacher, head- teacher, FGD, SMC/PTA members expressed that Co-curricular activities in school have been improved quite numerously.

Another significant contribution towards overall school development through teacher training appeared as health and hygiene of school children as well as school environment. Adequate information through various sources of research design indicated health and hygiene of students were improved.

Another point to be highlighted on overall school development is planned teaching and learning organization in schools. Academic time tables are displayed along with activities responding to local festivals and ceremonies.

Participation of local communities in school's overall development and management is the point to be considered which showed positive improvement after teacher training. The teachers and head teachers were active on pursuing the communities to bring into school management and also for overall school development. However, it is also found that local interference on smooth running of school was over ambitious in some cases.

Parents' involvement on children learning has been noticed significantly in the research. Feed back both to teachers and parents concerning child development has begun to happen formally after the teacher training.

Authoritarian teachers as an aptitude problem began to transform into facilitator role by teachers . Students come forward with genuine problem regarding teaching and learning and teachers role regarding helping students were noticed significantly during the research.

## **Recommendations**

Trained teachers were found instrumental for overall development of school. On the basis of this finding, the study recommends making trained teachers more assertive for the desired transformations in education and the system should be geared to support them through

resource center. Currently, resource centers are performing less than what is expected of them by the system.

As the findings indicate numerous things are happening but policies should be developed and implemented in consistent and in planned way.

The provisions should be there to recruit and maintain adequate number of physically and psychologically trained to further up the co-curricular activities in the schools.

Community mobilization should be further strengthened to full fill the physical infrastructure of the school and teachers and head teachers should be trained in this aspect. The skills and competencies required for fund raising should be imparted to teacher and head teachers. DEO and RPs should be more active on guiding teachers and head teachers regarding overall development of schools.

### **Summary of Recommendations**

- Teachers over five years in service must receive refresher training and/or qualification upgrading programs.
- Institutions providing teacher training should be made accountable for the quality of teacher's performance in the classroom. Resource centres and Resource Persons should be made more accountable.
- Varied training packages that suit with the teachers' different abilities, expectations and experiences need to be designed and delivered short term and periodic.
- It is high time to rethink the assumption that 'teachers' training contributes everywhere'. Training is not the solution to every performance problem.
- Teacher training should focus on narrow and specific objectives based on needs.
- Skill is there, attitude is the problem, and the context and environment is less supportive. Promote attitude for high performance, and create conducive environment.
- Bridge the gap between school life situation and the training delivery contexts (it was found argued that training is often 2 feet higher than the trainees' reality!!)

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## Annexes

**Annex I: Instruments Used for data collection**

**Questionnaire for teachers**

**प्रश्नावली )दश महिने प्राथमिक शिक्षक तालिम लिएका शिक्षकले भर्नुपर्ने(**

शिक्षकको नाम:

विद्यालयको नामः

विद्यालय कोडः

विद्यालयको प्रकारः प्राथमिक ९ ० निम्न माध्यमिक/ माध्यमिक ९ ० उच्च माध्यमिक ९ ०

। तपाईंले प्राथमिक शिक्षक तालिमका कतिवटा चरणहरू पुरा गर्नुभएको छ ?

प्रथम चरण मात्र ( )

प्रथम र दोश्रो चरण मात्र ( )

प्रथम ,दोश्रो र तेस्रो चरण मात्र ( )

सबै चार चरणहरू ( )

यदि सबै चरण पुरा गर्नु भएको भए ,पुरा गरेको मिति :.....:

। तालिम लिए पश्चात ,तपाईंले निम्न कुराहरू गर्दै आइरहनुभएको छ?

शिक्षण सामग्रीको प्रयोग

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शिक्षण सामग्रीहरू तयार गर्ने

छ ( ) छैन ( )

शिक्षणलाई दृश्यात्मक बनाउने

छ ( ) छैन ( )

सृजनात्मक सीपको प्रदर्शन

छ ( ) छैन ( )

विद्यार्थीहरूलाई संलग्न गर्ने

छ ( ) छैन ( )

विद्यार्थीको सिकाई उपलब्धिको परीक्षण गर्ने

छ ( ) छैन ( )

। यी भन्दा बाहेक कक्षाको शिक्षण सिकाईलाई सुधार गर्न तपाईंले के कस्ता थप योगदान पुऱ्याउनुभएको छ?

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। तालिममा सिकेका ज्ञान तथा सीपलाई कक्षामा प्रसार/प्रयोग गर्न बाधा तथा चुनौतिका सामना गर्नुभएको छ?

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। तालिममा सिकेका ज्ञान तथा सीपलाई कार्यथलोमा प्रसार/प्रयोग गर्न निम्न माध्यमहरूबाट के कस्ता सहयोग प्राप्त गर्नुभएको छ?

प्रधानाध्यापक	सहकर्मी शिक्षकहरू	अभिभावक / शिक्षक संघ	विद्यालय व्यवस्थापन समिति	अन्य )उल्लेख गर्नुहोस्(

। तालिम लिए पश्चात ,विद्यार्थीहरूको सिकाई उपलब्धिमा सुधार ल्याउन )विद्यार्थीको निरन्तरता , उत्प्रेरणा (के कस्ता विशेष कामहरू गर्नुभएको छ?

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। तपाईंले शैक्षिक कुशलतामा सुधार ल्याउन कसरी सहयोग गर्नुभएको छ?

भाषण विधि भन्दा बाहेक अरु विधिको प्रयोग छ ( ) छैन ( )

अभिभावकलाई संलग्न गर्ने छ ( ) छैन ( )

हरेक विद्यार्थीलाई ध्यान दिने छ ( ) छैन ( )

अन्य )उल्लेख गर्नुहोस् ( छ ( ) छैन ( )

। तपाईंको विद्यालयमा पिछडिएको समुदायका बालबालिकाको भर्नासंख्या विगतका दिनहरूको दौंजोमा वृद्धि भएको छ?

छ ( ) छैन ( )

यदि छ भने ,तपाईंको विद्यालयमा पिछडिएको समुदायका बालबालिकाको संख्या वृद्धि गर्न तपाईंले के गर्नुभयो?

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। दश महिने प्राथमिक शिक्षक तालिमले तपाईंको आफ्नो पेशागत विकासमा सुधार ल्याउन के कसरी मद्दत पुऱ्याएको छ?

पेशागत जमघटहरूमा विचारको अदान प्रदानमा वृद्धि छ ( ) छैन ( )

अध्ययनशिलतामा वृद्धि छ ( ) छैन ( )

पेशागत संजालमा वृद्धि छ ( ) छैन ( )

अनुसन्धानमा संलग्नता छ ( ) छैन ( )

आत्मविश्वासको विकास छ ( ) छैन ( )

। आफ्नो तथा आफ्नो शैक्षिक पेशाको विकासको लागि तपाईंको भावि योजना के छ?

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। दश महिने प्राथमिक शिक्षक तालिमको कारण केही नकारात्मक असर परेको छ?

कार्यभारमा वृद्धि भएको छ ( ) छैन ( )

शिक्षकहरूको बिचमा असमझदारी छ ( ) छैन ( )

व्यवस्थापनसंग असमझदारी छ ( ) छैन ( )

अभिभावकसंग असमझदारी छ ( ) छैन ( )

समय व्यवस्थापनमा कठिनाई छ ( ) छैन ( )

। शिक्षणका अतिरिक्त तपाईंलाई थप जिम्मेवारिहरू दिइएको छ?

छ ( ) छैन् ( )

यदि छ भने ,के के हुन् )थप जिम्मेवारीका उदाहरणहरु दिनुहोस्(

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। दश महिने प्राथमिक शिक्षक तालिमले विद्यालयको संपुर्ण विकासमा के कस्ता सकारात्मक वा नकारात्मक परिवर्तन ल्याएको छ?

सकारात्मक परिवर्तन )जस्तै :शिक्षाको गुणस्तर ,पहुँच ,समतामा वृद्धि(.....	नकारात्मक परिवर्तन )जस्तै :विद्यार्थी संख्यामा कमि ,शिक्षकको कार्यभारमा वृद्धि , अनियमितता(.....
ब० द० अ० म० भ० ि०	न० ज० घ० व० प० ठि

। यस्ता सकारात्मक वा नकारात्मक परिवर्तनका कारणहरु के के हुन्?

सकारात्मक परिवर्तनका कारणहरु	नकारात्मक परिवर्तनका कारणहरु
न० ल० य० उ० त्र० च०	क० त० ग० ख० घ० ह०

। दश महिने प्राथमिक शिक्षक तालिममा सिकेका ज्ञान तथा सीपलाई विद्यालयमा कार्यान्वयन गर्न के कस्ता कठिनाईहरु छन्?

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। तपाईंको बिचारमा दश महिने प्राथमिक शिक्षक तालिमकै कारणले ल्याएको एउटै मात्र योगदान के होला?

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। अन्तमा ,शिक्षण ,सिकाइ तथा विद्यार्थीको उपलब्धिमा थप योगदान पुऱ्याउन दश महिने प्राथमिक शिक्षक तालिममा के कस्ता सुधार गर्नुपर्ला?

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धन्यवाद !

Annex II: Head Teacher Questionnaire

प्रश्नावली )प्रधानाध्यापकले भर्नुपर्ने(

विद्यालयको नाम:

जिल्लाको नाम:

विद्यालयको प्रकार: प्राथमिक ( ) निम्न माध्यमिक/ माध्यमिक ( ) उच्च माध्यमिक ( )

. तपाईंले विद्यालय व्यवस्थापन सम्बन्धि तालिम लिनुभएको छ?

छ ( ) छैन ( )

छ भने ,लेख्नुहोस् :तालिमको अवधि ( )तालिम लिएको मिति ( )

. यस विद्यालयमा कति जना दश महिने प्राथमिक शिक्षक तालिम प्राप्त शिक्षकहरु छन्?

पुरुष शिक्षक ( ) महिला शिक्षक ( )

. तालिम लिए पश्चात शिक्षकहरुले निम्न कुराहरु गर्दै आइरहनुभएको छ?

शिक्षण सामग्रीको प्रयोग छ ( ) छैन ( )

शिक्षण सामग्रीहरु तयार गर्ने छ ( ) छैन ( )

शिक्षणलाई दृश्यात्मक बनाउने छ ( ) छैन ( )

सृजनात्मक सीपको प्रदर्शन छ ( ) छैन ( )

विद्यार्थीहरुलाई संलग्न गर्ने छ ( ) छैन ( )

विद्यार्थीको सिकाइ उपलब्धिको परिक्षण गर्ने छ ( ) छैन ( )

. यी भन्दा बाहेक कक्षाको शिक्षण सिकाइलाई सुधार गर्न तालिम प्राप्त शिक्षकले के कस्ता थप योगदान पुऱ्याउनुभएको छ?

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. विद्यार्थीको सिकाइ उपलब्धिमा सुधार ल्याउन तालिम प्राप्त शिक्षकले निम्न कुरा गर्नु भएको छ?

- |   |               |
|---|---------------|
| भाषण विधि भन्दा बाहेक अरु विधिको प्रयोग | छ ( ) छैन ( ) |
| अभिभावकलाई संलग्न गर्ने                 | छ ( ) छैन ( ) |
| हरेक विद्यार्थीलाई ध्यान दिने           | छ ( ) छैन ( ) |
| अन्य )उल्लेख गर्नुहोस् (                | छ ( ) छैन ( ) |

. तालिम प्राप्त शिक्षकहरूले पिछडिएको समुदायका बालबालिकालाई कस्तो व्यवहार गर्नुहुन्छ?

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. तालिम प्राप्त शिक्षकहरूले पिछडिएको समुदायका बालबालिकाको शिक्षामा पहुँच वढाउन तालिममा सिकेका कुराहरूको प्रयोग कसरी गर्नुभएको छ?

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. तैपाइको विद्यालयमा पिछडिएको समुदायका बालबालिको पहुँच वढाउन प्राथमिक शिक्षक तालिममा के सुधार ल्याउनुपर्दछ?

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. के तालिम प्राप्त शिक्षकहरू आफ्नो निरन्तर वृत्ति विकास प्रति सचेत छन्?

छन् ( ) छैनन् ( )

यदि छन् भने ,उनिहरुले के कसरी आफ्नो पेशागत अभिवृद्धि गरिरहेका छन्?

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यदि छैनन् भने ,किन नगरेका होलान् र उनीहरुको पेशागत अभिवृद्धिको विकासमा के कस्तो सहयोग पुऱ्याउनुपर्ला?

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. तालिम प्राप्त शिक्षकलाई अझ राम्रो काम गर्न तँपाइले कसरि सहयोग गर्नुभएको छ?

थप तालिमको व्यवस्था छ ( ) छैनन् ( )

योजना गर्ने काममा सहयोग छ ( ) छैनन् ( )

शैक्षिक सामग्रीको व्यवस्था छ ( ) छैनन् ( )

सुपरिवेक्षण छ ( ) छैनन् ( )

निरन्तर पृष्ठपोषण छ ( ) छैनन् ( )

अन्य )उल्लेख गर्नुहोस् ( छ ( ) छैनन् ( )

. विद्यालय विकासका कृयाकलापका कुन पक्षमा तँपाइले विद्यालय व्यवस्थापन समितिसंग परामर्श लिने गर्नुभएको छ?

योजना बनाउन )विद्यालय सुधार योजना ,वार्षिक योजना(

छ ( ) छैनन् ( )

यदि छ भने ,कसरि.....

निर्णय निर्माण

छ ( ) छैनन् ( )

यदि छ भने ,कसरि.....

संचार प्रकृया

छ ( )छैन् ( )

यदि छ भने ,कसरि.....

शिक्षकलाइ सहयोग

छ ( )छैन् ( )

यदि छ भने ,कसरि.....

योजनाको संपुर्ण कार्यान्वयन

छ ( )छैन् ( )

यदि छ भने ,कसरि.....

. विद्यालयको सम्पूर्ण विकासका लागि के कास्ता विशेष योजना हरु )जस्तै :रणनितिक दिर्घकालिन योजना (बनाउनुभएको छ ?

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. दश महिने प्राथमिक शिक्षक तालिमले विद्यालयको संपुर्ण विकासमा के कस्ता सकारात्मक वा नकारात्मक परिवर्तन ल्याएको छ?

सकारात्मक परिवर्तन )जस्तै :शिक्षाको गुणस्तर ,पँहुच ,समतामा वृद्धि(.....	नकारात्मक परिवर्तन )जस्तै :विद्यार्थि संख्यामा कमि ,शिक्षकको कार्यभारमा वृद्धि , अनियमितता(.....
1)	1)
2)	2)
3)	3)
4)	4)
5)	5)

. यस्ता सकारात्मक वा नकारात्मक परिवर्तनका कारणहरु के के हुन्?

सकारात्मक परिवर्तनका कारणहरु	नकारात्मक परिवर्तनका कारणहरु
1)	1)
2)	2)
3)	3)



### **Annex III: Focus-Group-Discussion (FGD) guiding questions**

*(to be used with groups of trained teachers, SMC/PTA members and DEO/RP/SS/ETC trainers separately)*

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1. How are the trained teachers contributing differently in improving quality of the students' learning achievement and developments? (e.g. improved methods, students involvement, higher scores, praise, resourcefulness, proper assessment, better questions, joyful learning for students etc.)
2. What important changes have you observed in students' learning achievement that could be due to teachers training (e.g. increased scores, decreased failures, higher division, improved study habits etc...)
3. How useful is the head teacher's management training in utilizing the knowledge and skills of primary teachers who have received NCED's 10 months training?
4. What efforts do the trained teachers put for their own development (e.g. involvement in planning SIP, study habits, partnerships, collegiality, network, learning events etc.)
5. What major improvements have you observed in overall school development that could be due to the 10 months primary teacher training? (e.g. schools' image, discipline, public participation, co-curricular activities, health and hygiene, social activities, teacher collegiality, competitions etc.)
6. How have the head teacher and trained teachers been helpful in increasing enrollment and retention of the children from the marginalized community? (e.g. dalits, girls, janjatis etc.)
7. What specific suggestions you give to make teacher training programmes more effective (e.g. design, content, modality, value added, promotions, further training recognition etc.)
8. Finally, what 'one contribution' can you name that has been the impact of 10 months primary teacher training so far? (e.g. use of textbooks and curricula, confidence, collegiality, motivation, improved methods, learning achievement, students participation, practice activities etc.).

**Annex IV: Focus-Group-Discussion (FGD) Notes**

*Facilitator/researcher:*

*Date:*

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**Name of the school:**

**School code:**

**Number of participants:**

**Group type:** Trained teachers ( ) SMC/PTA ( ) DEO/RP/SS/ETC trainers ( )

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Notes:

**Annex V: Observation instrument***(Used by researchers for observing school environment and classroom teaching)***Name of the school:****Teacher's Name:****Sex:****Grade:****No. of students:****Subject:****Topic:****Observer:****Date and Time:**

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***Direction: Please use the following scale to rate physical environment and performance of teacher.***

<b>Rating</b>	<b>Meaning</b>	<b>Description</b>
4	Competent	consistent and self-directed, creative and resourceful
3	Satisfactory	developing consistency and independence
2	Needs Improvement	demonstrate little competence, may require guidance and assistance
1	Unacceptable	unsuccessful, no competence

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**A. Physical environment:**

		<b>Ratings</b>				<b>Comments</b>
		<b>Low</b>		<b>High</b>		
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	
<b>1.</b>	<b>Classroom decoration</b>					
<b>2.</b>	<b>Seating arrangement</b>					
<b>3.</b>	<b>Room size (students/room)</b>					
<b>4.</b>	<b>Furniture arrangement</b>					
<b>5.</b>	<b>Ventilation</b>					

**B. Teacher performance observation:**

S. No.	Behavior	Rating				Comments
		1	2	3	4	
<b>1.</b>	<b>Preparation</b>					
	Lesson plan is available					
	Resources are available					
	Facilities are arranged					
<b>2.</b>	<b>Presentation:</b>					
2.a	<i>Platform skills (voice, body language)</i>					
	Eye contact is equal					
	Gestures are non-distracting					
	Voice is clear and audible					
	Words used are clear and understandable					
2.b	<i>Content</i>					
	Materials are relevant with the topic					
	Materials are presented sequentially					
	Examples are provided for clarity of information					
	Information is repeated for the slow learners					
2.c	<i>Delivery</i>					
	Expected behavior (learning outcome) is displayed/communicated					
	Varieties of methods are used (group work, individual work, pair work etc.)					
	Methods match with content					
	Learners are actively involved					
	Learners are involved fairly in terms of their caste, gender, religion, economic status etc.					
2.d	<i>Resources/materials</i>					
	Subject specific materials are used					
	Locally available materials are used to prepare visuals					
	Resources add to the learning experience (based on learning outcome)					
	Resources are used proficiently					
2.e	<i>Interaction with learners</i>					
	Learners name used					
	Questions are frequently asked					
	Learners questions are answered with					

	encouraging feedback					
<b>3.</b>	<b><i>Assessment and feedback</i></b>					
	Learners are assessed for level of understanding					
	Encouragement and developmental feedback is provided					
	Teacher moves among learners					
<b>4.</b>	<b><i>Concluding the lesson</i></b>					
	Content and objectives reviewed					
	Class ends on time					
<b>5.</b>	<b><i>Learning transfer strategies</i></b>					
	Homework is provided with proper direction					
	Project work is given with proper direction					
	Practice opportunities are provided where needed					

**General comments:**

## Annex VI: Achievement Tests

### Annex VI-1: Grade III: Social Studies

### सिकाइ उपलब्धि परीक्षा

कक्षा: ३

समय: १

घण्टा

विषय: सामाजिक अध्ययन

पूर्णाङ्क:

१००

प्र १. ठीकमा (✓) र बेठीकमा (✗) चिन्ह लगाऊ । (७×२ = १४)

- क) म भाँडाबर्तन भान्छामा राख्छु । ( )  
ख) धारा, इनार फोहोर गर्नेलाई असल व्यवहार भएको व्यक्ति मानिन्छ । ( )  
ग) छुवाछुतको व्यवहार गर्नेलाई सामाजिक बहिष्कार गर्नुपर्छ । ( )  
घ) हामीले प्राकृतिक सम्पदाहरूको संरक्षण गर्नुहुँदैन । ( )  
ङ) हाम्रा गाउँमा बनेका सामानहरू नराम्रा र कमजोर हुन्छन् । ( )  
च) हामी आफ्नै भाषा, भेषभूषा, लवाइखवाइ र चालचलनमा रमाउनुपर्छ । ( )  
छ) व्यापारीले सामान किनबेच गर्दछ । ( )

प्र २. खाली ठाउँमा सुहाउँदो शब्द भर । (६×२ = १२)

- क) अनिसको ..... पैँतीस वर्षको हुनुहुन्छ । (बुबा/आमा)  
ख) ए ! दिदी आउनुभएछ । दिदी ..... । (नमस्कार/ढोग)  
ग) बलभद्र कुँवर नेपालका ..... सपुत हुन् । (वीर/डरपोक)  
घ) विभिन्न समुदायका मानिसले ..... काम गर्छन् । (फरक फरक/एउटै)  
ङ) नेपालको राजधानी ..... हो । (पोखरा/काठमाडौँ)  
च) म बसेको ठाउँमा ..... हुन्छ । (धेरै गर्मी/न जाडो न गर्मी/धेरै जाडो)

प्र ३. जोड मिलाऊ । (५×२ = १०)

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|--------------------|----------|
| किताब, कापी        | पिँढीमा  |
| लुगा, कपडा         | भान्छामा |
| थाल, कचौरा         | भोलामा   |
| गुन्द्री, मान्द्रो | खाल्डोमा |
| घरको फोहोर         | दराजमा   |
|                    | बाटोमा   |

प्र ४. तलका नक्सा हेरी ठीक शब्दमा गोलो घेरा लगाऊ: (५×२ = १०)

क) भरना / खोला



ख) गोरेटो / सडक



ग) हवाई मैदान / खेल मैदान



घ) अस्पताल / स्कुल



ड) घर / मन्दिर



प्र ५. कुनै काम गर्नेलाई के भनिन्छ ? लेख । (५×३ = १५)

- |                      |   |       |
|----------------------|---|-------|
| क) खेती गर्ने        | - | ..... |
| ख) बिरामी जाँच्ने    | - | ..... |
| ग) व्यापार गर्ने     | - | ..... |
| घ) विद्यालयमा पढाउने | - | ..... |
| ड) गाईबस्तु हेर्ने   | - | ..... |

प्र ६. कुनै तीनओटा चाडपर्वहरूका नाम लेख । (३×३ = ९)

- १)
- २)
- ३)

प्र ७. निम्न लिखित प्रश्नहरूका संक्षिप्त उत्तर देऊ । (६×५ = ३०)

- क) तिम्रो परिवारमा को को हुनुहुन्छ ? लेख ।

- ख) घरमा आएको पाहुनासँग कस्तो व्यवहार गर्नुपर्छ ?  
ग) श्रीपञ्चमीमा कसको पूजा गरिन्छ र उनी के का प्रतीक हुन् ?  
घ) तिम्रो घर गाउँ विकास समिति वा नगरपालिकामध्ये कुनमा पर्दछ ?  
ङ) टुक्रिएर रहेको नेपाललाई कसले सिङ्गो राष्ट्र बनाए ?  
च) बुटवलमा कस्ता किसिमका उद्योगहरू छन् ? कुनै तीनओटाको नाम लेख्नुहोस् ।

समाप्त

## उत्तर कुञ्जिका

कक्षा: ३  
विषय: सामाजिक अध्ययन

समय: १ घण्टा  
पूर्णाङ्क: १००

प्र १. प्रत्येक ठीक उत्तरका लागि २ का दरले १४ अङ्क प्रदान गर्ने ।

- क) (✓)    ख) (✗)    ग) (✓)  
घ) (✗)    ङ) (✗)    च) (✓)  
छ) (✓)

प्र २. प्रत्येक ठीक उत्तरका लागि २ का दरले १२ अङ्क प्रदान गर्ने ।

- क) आमा  
ख) नमस्कार  
ग) वीर  
घ) फरकफरक  
ङ) काठमाडौँ  
च) आफ्नो ठाउँअनुसारको उपयुक्त शब्द छानी लेखेमा

प्र ३. प्रत्येक ठीक उत्तरका लागि २ का दरले १० अङ्क प्रदान गर्ने ।

- |                    |          |
|--------------------|----------|
| किताब, कापी        | भोलामा   |
| लुगा, कपडा         | दराजमा   |
| थाल, कचौरा         | भान्छामा |
| गुन्द्री, मान्द्रो | पिँढीमा  |
| घरको फोहोर         | खाल्डोमा |

प्र ४. प्रत्येक ठीक उत्तरका लागि २ का दरले १० अङ्क प्रदान गर्ने ।

- क) खोला  
ख) सडक  
ग) हवाई मैदान  
घ) अस्पताल  
ङ) मन्दिर

प्र ५. प्रत्येक ठीक उत्तरका लागि ३ का दरले १५ अङ्क प्रदान गर्ने ।

- |                      |            |
|----------------------|------------|
| क) खेती गर्ने        | – किसान    |
| ख) बिरामी जाँच्ने    | – डाक्टर   |
| ग) व्यापार गर्ने     | – व्यापारी |
| घ) विद्यालयमा पढाउने | – शिक्षक   |
| ङ) गाईबस्तु हेर्ने   | – गोठालो   |

प्र ६. कुनै तीनओटा चाडपर्वहरूका नाम उल्लेख गरेमा – जस्तै : दसैं, तिहार, इद, क्रिस्मस, ल्होसार, उभौली आदि लेखेमा ३ का दरले ९ अङ्क प्रदान गर्ने ।

प्र ७. प्रत्येकको ५ अङ्कका दरले ३० अङ्क प्रदान गर्ने ।

क) आफ्नो परिवारका सदस्यहरूको सम्बन्ध जनाउने उपयुक्त पाँचओटा उत्तर लेखेमा ५ अङ्क प्रदान गर्ने ।

ख) असल

ग) सरस्वती, विद्याकी

घ) गा. वि. स. वा नगरपालिकामध्ये कुनै एक लेखेमा ।

ङ) पृथ्वीनारायण शाह भनी लेखेमा ।

च) कपडा, धागो, बिस्कुट, जुत्ता, टेलिभिजन, साबुन आदि सामान बनाउने उद्योग भनी लेखेमा ।

समाप्त

**Annex VI-2: Grade III: English**

**Learning Achievement Test**

Grade: III

Subject: English

Time: 1 Hour

Full marks: 100

**Attempt all the questions:**

1. Read the following text and do the activities that follow:

Gauri was a young village girl. She was fourteen years old. She helped her mother in the home and in the farm. One day Gauri's mother went to her sister's home. She said to Gauri, "You'll milk the cow and you'll sell the milk."

Gauri said, "Yes mummy, I'll milk the cow and sell the milk."

On the way to the market she thought, "I'll sell the milk and with the money I'll buy hens. The hens will lay eggs. The eggs will give me more hens. I'll be a rich girl in the village."

a. Write 'True' or 'False'. (2x4=8)

i. Gauri was a village girl. ....

ii. She helped her mother in the home only. ....

iii. Gauri milked the cow when her mother was not at home. ....

iv. She sold the milk in the market. ....

b. Match the words in Column A with their meaning in Column B. (2x4=8)

**Column A**

Gauri was

Gauri's mother went

**Column B**

to her sister's home.

eggs.



2. Answer the following: (2x5=10)

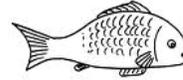
a. What time is it?

It's .....



b. Is this a bird or a fish?

This .....



c. Where is the ball?

It's .....



d. Which month is colder, March or February?

.....



e. Who drives a car, a driver or a pilot?

.....



3. Arrange these words to make sensible sentences: (2x5=10)

a. am years I old nine.

.....

b. doll I beautiful a have.

.....

c. parents my me love.

.....

d. I school go everyday to.

.....

e. he in office works an.

.....

4. Match the following: (2x5=10)

India	Nepali
China	French
Japan	Indian
Nepal	Chinese
France	Japanese
	American

5. Make sentences from the table. The first one has been done for you: (2x5=10)

Time	What you did yesterday
6.00 am	woke up
8.00 am	had meal
8.30 am	left home
9.00 am	reached school
4.00 pm	returned home
4.30 pm	played with friends

a. I woke up at 6.00 am yesterday.

b. ....

c. ....

d. ....

e. ....

f. ....

6. Complete the dialogue using the words given in the box below: (10)

Prem : Hello!

Dolma : .....! Dolma speaking.

Prem : ....., Dolma, how are you?

Dolma : ....., thank you.

Prem : What did you do .....

Dolma : ....., I did my English homework.

Well Fine Hello Hi yesterday

7. Fill in the blank spaces to complete this letter. Use the words/phrases given in the box below: (18)

8, Lakeside  
Pokhara

.....

.....Ali,

Thank you very much for my birthday present. **Muna** is an .....  
book. I like it .....

I hope you are coming to my ..... party. My father is  
..... from home. So we are waiting for ..... The  
birthday party will be .....August 12<sup>th</sup>.

.....,

Anu

With love	Dear	interesting	very much	away
him	birthday	on	21 <sup>st</sup> July 2009	

The End

### Annex VI-3: Grade III: Math

### सिकाइ उपलब्धि परीक्षा

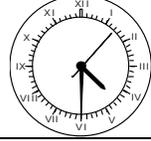
कक्षा: ३	समय: १
घण्टा	
विषय: गणित	पूर्णाङ्कः
१००	

"समूह - क" बस्तुगत प्रश्नहरू: (१०×२ = २०)

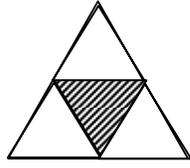
ठीक उत्तरमा (✓) चिन्ह लगाऊ :

- ५४३९ भन्दा पछि आउने सङ्ख्या कुन हो ?  
(क) ५४३८ (ख) ५४४० (ग) ४४३९ (घ) ६४३९
- १ हप्तामा ७ दिन हुन्छ भने ५ हप्तामा कति दिन हुन्छ ?  
(क) ३५ (ख) ३० (ग) ४० (घ) २५

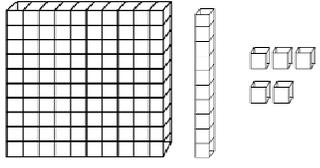
३. चार भुजा मिलेर बनेको बन्द आकृति (चित्र) लाई के भनिन्छ ?  
 (क) त्रिभुज (ख) त्रिकोण (ग) चतुर्भुज (घ) पञ्चभुज

<p>४. चित्रमा देखाइएको घडीमा कति बज्यो ?          (क) ३:१५ (ख) ६:१५          (ग) ९:१५ (घ) ४:३०</p>	
--	---

५.  $१५ \times \square = ४५$  मा खाली कोठामा मिल्ने सङ्ख्या कुन हो ?  
 (क) ५ (ख) ३० (ग) ३ (घ) १५

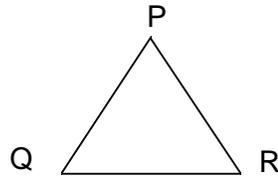
<p>६. दायाँको चित्रमा छाया पारिएको भागले कुन भिन्न जनाउँछ ?          (क) <math>\frac{३}{४}</math> (ख) <math>\frac{१}{४}</math> (ग) <math>\frac{२}{४}</math> (घ) <math>\frac{४}{४}</math></p>	
--	---

७. ७८५४ मा ७ कुन स्थानमा छ ?  
 (क) एक (ख) दस (ग) सय (घ) हजार
८. {किताब, कपी, कलम, टोपी} यस समूहमा नमिल्ने कुन हो ?  
 (क) किताब (ख) कपी (ग) कलम (घ) टोपी

<p>९. चित्रमा देखाइएका ब्लकहरूले जनाउने सङ्ख्या कुन हो ?          (क) १२५ (ख) ११५          (ग) १०२५ (घ) ३१५</p>	
---	--

१०. १ मीटरमा कति से.मि. हुन्छ ?  
 (क) १० से.मि. (ख) ५० से.मि. (ग) १०० से.मि. (घ) १००० से.मि.  
 "समूह - ख" विषयगत प्रश्नहरू: (८×१०= ८०)

१. चित्रमा देखाइएको त्रिभुजको नाम, त्यसका शीर्षविन्दु, कोण र भुजाहरूका नाम लेख ।



२. (क) सङ्ख्या ४,८३५ लाई स्थानमान तालिकामा राखी अक्षरमा पनि लेख ।  
 (ख) तल दिइएका सङ्ख्याहरूलाई ठूलोदेखि सानोसम्म क्रम मिलाएर लेख:  
 ७८९०, ७९८०, ७०८९, ७०९८
३. रामले फलफूल बगैँचाका तीनवटा बोटबाट क्रमशः ७५०, ५७७ र ६८५ ओटा नास्पाती टिपेर बेचेछन् । उनले जम्मा कतिओटा नास्पाती बेचेछन् ?

४. गुणन गर :  
१८९  
× ७६

५. १५० ओटा सुन्तला १५ जना विद्यार्थीलाई बराबरी बाँड्दा प्रत्येकको भागमा कति कति सुन्तला पर्लान् ?

६. एउटा कलमको मूल्य रु १२ पर्छ भने त्यस्तै २० ओटा कलमको मूल्य कति पर्ला ?

७. हप्ताका सात बारहरुको समूहलाई समूह सङ्केतमा लेख ।

८. क) जोड गर :  $\frac{३}{१०} + \frac{४}{१०}$

समाप्त

## उत्तर कुञ्जिका

कक्षा: ३  
घण्टा  
विषय: गणित  
१००

समय: १

पूर्णाङ्कः

"समूह - क" बस्तुगत प्रश्नहरू: (१०×२ = २०)

- |      |      |      |      |       |
|------|------|------|------|-------|
| १. ख | २. क | ३. ग | ४. घ | ५. ग  |
| ६. ख | ७. घ | ८. घ | ९. ख | १०. ग |

"समूह - ख" विषयगत प्रश्नहरू: (१०×८ = ८०)

१. त्रिभुजको नाम :  $\triangle PQR$

२ शीर्षविन्दुहरू : P, Q, R

२ कोणहरू :  $\angle PQR, \angle QPR$  र  $\angle PRQ$

२ भुजाहरू : PQ, QR र PR

२. क) स्थानमान तालिका :

३

हजार	सय	दश	एक
४	८	३	५

अक्षरमा : चार हजार आठ सय पैंतीस

१

ख) ७९८०, ७८९०, ७०९८, ७०८९

४

३. ७५०

५७७

+६८५

२०१२

७

जम्मा २०१२ नास्पाती बेचेछन् ।

१

४. १८९

$$\begin{array}{r} \times 76 \\ 9938 \\ +9323 \\ \hline 98368 \end{array}$$

५.  $95)950(10$

७

$$\begin{array}{r} -95 \\ 0 \end{array}$$

प्रत्येकका भागमा १०/१० ओटा सुन्तला पर्छन् ।

१

६. एउटा कलमको मूल्य = रु. २०  
१२ ओटा कलमको मूल्य = रु. २० x १२  
= रु. २४० निकालेमा

७

२० कलमको मूल्य रु २४० पर्छ भनी उत्तर लेखेमा

१

७. {आइतबार, सोमबार, मंगलबार, बुधबार, विहवार, शुक्रबार, शनिबार}

८

८. क) ३+४

४

१०

= ७

४

१०

समाप्त

Annex VI-4: Grade III: Nepali

सिकाइ उपलब्धि परीक्षा

कक्षा: ३

समय: १

घण्टा

विषय: नेपाली

पूर्णाङ्क: १००

प्रश्न १. तलका कुराहरू राम्ररी पढ र ठीक भए (✓) चिन्ह र बेठीक भए (✗) चिन्ह देऊ: (१०)

क) प्रत्येक वर्षको वैशाख १ गते नयाँवर्ष मनाइन्छ। ( )

ख) देवकोटाले दसवर्षकै उमेरमा कविता लेखेका होइनन्। ( )

ग) “घामछाया” कविता माधव घिमिरेले लेखेका हुन्। ( )

घ) दुङ्गेबाट पनि खिचडी पकाउन सकिन्छ। ( )

ङ) रूखबिरुवाले भूक्षय रोक्दछ। ( )

प्रश्न २. तलका शब्दहरूलाई वाक्यमा प्रयोग गरः (१०)

पुतली      खिचडी      सलाई      गैँडा      आकास

प्रश्न ३. बायाँका शब्दहरूको अर्थ पत्ता लगाई दायाँका शब्दसँग जोडा मिलाऊः (१०)

१) आपत	क) खानेकुरा	१) .....
२) खप्पिस	ख) बादल	२) .....
३) आहार	ग) भिड	३) .....
४) मेघ	घ) दुःख	४) .....
५) घुइँचो	ङ) सिपालु	५) .....

प्रश्न ४. तलका शब्दहरू अशुद्ध छन्, शुद्ध गरी सारः (५)

क) बतुवा	क) .....
ख) शीक्षक	ख) .....
ग) समुर्द	ग) .....
घ) विड्यालय	घ) .....
ङ) परीवार	ङ) .....

प्रश्न ५. तलका कुराहरू पढ, बुझ र कसले कसलाई भनेको हो, नाम लेखः (१०)

क) तिम्रो घरबाट सामान किन्न को जान्छ नि ?  
.....ले .....लाई

ख) कसैले पनि नदेख्ने ठाउँमा गएर लुक्नू ।  
.....ले .....लाई

ग) खानेकुराको केही चिन्ता लिनुपर्दैन । आज म ढुङ्गो पकाएर खान्छु ।  
.....ले .....लाई

घ) मनाउनु त पर्ने हो तर हामीसित पैसा छैन ।  
.....ले .....लाई

ङ) अब त म तेरो मुटु र कलेजो खान्छु ।  
.....ले .....लाई

प्रश्न ६. तलका वाक्यहरूमा शब्दहरू मिलेर बसेका छैनन्, शब्दहरू मिलाएर शुद्ध वाक्य बनाऊः(१०)

क) म जान्छु घर ।

.....।

ख) लागेर बादल पन्यो पानी ।

.....।

ग) साथी मेरो लेख्छ कविता ।

.....।

घ) फुल्ल बगैँचामा फूल ।

.....।

ङ) चरो कालो उड्यो ।

.....।

प्रश्न ७. तलको सूचना राम्ररी पढी, बुझी तल सोधिएका प्रश्नहरूको ठीकठीक उत्तर देऊः (२०)

फागुनदेखि वैशाखसम्मको अवधि हावाहुरी आउने समय हो । यस समयमा आगो बाल्दा सुरक्षित ठाउँमा बाल्नुपर्दछ । सलाई, लाइटर, मटीतेल आदि वस्तु केटाकेटीले भेट्ने ठाउँमा राख्नुहुँदैन । जथाभावी आगो बाल्दा हुने दुर्घटनाबारे केटाकेटीलाई सम्झाउनुपर्दछ ।

नेपाल सरकार

सूचना तथा सञ्चार मन्त्रालय

सचना विभाग

प्रश्नहरू:

क) हावाहुरी आउने समय कुन हो ?

.....।

ख) आगो कस्तो ठाउँमा बाल्नुपर्दछ ?

.....।

ग) केटाकेटीले भेट्ने ठाउँमा केके राख्नुहुँदैन ?

.....।

घ) केटाकेटीलाई के कुरा सम्झाउनुपर्दछ ?

.....।

प्रश्न द. तलका प्रश्नहरूको ठीकठीक उत्तर देऊ: (२५)

क) खिचडी पकाउन थालेपछि बटुवाले केके माग्यो ?

.....  
..... ।

ख) हामीहरू पानी कुनकुन कामका लागि प्रयोग गर्दछौं ? तीनओटा कामहरू लेख्नुहोस् ।

.....  
..... ।

ग) हाटबजारमा केके सामान पाइन्छन् ?

.....  
..... ।

घ) नेपाली साहित्यका महाकवि को हुन् ?

.....  
..... ।

ङ) मानिसलाई आवश्यक पर्ने मुख्यमुख्य चारओटा कुराहरू केके हुन् ?

.....  
..... ।

समाप्त

## उत्तर कृञ्जिका

कक्षा: ३  
विषय: नेपाली

समय: १घण्टा  
पूर्णाङ्क: १००

- प्रश्न १. तलका कुराहरू राम्ररी पढ र ठीक भए (✓) चिन्ह र बेठीक भए (✗) चिन्ह देऊ: (१०)  
क. ( ✓ ) ख. ( ✗ ) ग. ( ✓ ) घ. ( ✗ ) ङ. ( ✓ )
- प्रश्न २. तलका शब्दहरूलाई वाक्यमा प्रयोग गर: (१०)  
एउटा वाक्यमा प्रयोग गरेको मिलाएमा २ अङ्कका दरले पाँचैओटा शब्दको वाक्यमा प्रयोग मिलाएमा बढीमा १० अङ्क प्रदान गर्ने ।
- प्रश्न ३. बायाँका शब्दहरूको अर्थ पत्ता लगाई दायाँका शब्दसँग जोडा मिलाऊ: (१०)  
१) घ २) ङ ३) क ४) ख ५) ग
- प्रश्न ४. तलका शब्दहरू अशुद्ध छन्, शुद्ध गरी सार: (५)  
क) बटुवा ख) शिक्षक ग) समुद्र घ) विद्यालय ङ) परिवार
- प्रश्न ५. तलका कुराहरू पढ, बुझ र कसले कसलाई भनेको हो, नाम लेख: (१०)  
क) शिल्पाले रामजनमलाई ख) गुरुले चेलीलाई ग) बटुवाले बूढीलाई  
घ) बूढाले बूढीलाई ङ) गोहीले बाँदरलाई
- प्रश्न ६. तलका वाक्यहरूमा शब्दहरू मिलेर बसेका छैनन्, शब्दहरू मिलाएर शुद्ध वाक्य बनाऊ: (१०)  
क) म घर जान्छु । ख) बादल लागेर पानी पयो । ग) मेरो साथी कविता लेख्छ ।  
घ) बगैँचामा फूल फुल्छ । ङ) कालो चरो उड्यो ।
- प्रश्न ७. तलको सूचना राम्ररी पढी, बुझी तल सोधिएका प्रश्नहरूको ठीकठीक उत्तर देऊ: (२०)  
क) फागुनदेखि वैशाख हावाहुरी आउने समय हो ।  
ख) आगो बाल्दा सुरक्षित ठाउँमा मात्र बाल्नुपर्दछ ।  
ग) केटाकेटीले भेट्ने ठाउँमा सलाई, लाइटर, मटीतेल आदि राख्नुहुँदैन ।  
घ) आगो बाल्दा हुने दुर्घटनाबारे केटाकेटीलाई सम्झाउनुपर्दछ ।
- प्रश्न ८. तलका प्रश्नहरूको ठीकठीक उत्तर देऊ: (२५)  
क) खिचडी पकाउन थालेपछि बटुवाले भाँडो, पानी, नुन, चामल, दाल र ध्यू माग्यो ।  
ख) हामीहरू पानी हातमुख धुन, खाना पकाउन र सामान सफा गर्न प्रयोग गर्दछौं । (जस्तै नुहाउन, पिउन आदि पनि हुन सक्छन् ।)  
ग) हाटबजारमा लुगाकपडा, फलफूल, तरकारी, चामल, दाल, मासु, खानेकुरा आदि पाइन्छन् ।  
घ) नेपाली साहित्यका महाकवि लक्ष्मीप्रसाद देवकोटा हुन् ।  
ङ) हामी मानिसहरूलाई आवश्यक पर्ने मुख्यमुख्य चारओटा कुराहरू खानेकुरा, पैसा, शक्ति र समय हुन् ।

## सिकाइ उपलब्धि परीक्षा

कक्षा: ५  
विषय: गणित

समय: १ घन्टा  
पूर्णाङ्क: १००

"समूह - क" वस्तुगत प्रश्नहरू: (२०×२=४०)

क) ठीक उत्तरको सङ्केत अक्षरलाई गोलो ○ घेरा लगाऊ:

१. 5780 लाई नजिकको हजारमा शून्यान्त गर्दा कति हुन्छ ?

(क) 5000 (ख) 6000 (ग) 7000 (घ) 8000

२. 4 को वर्ग र 25 को बर्गमूल जोड्दा कति हुन्छ ?

(क) 21 (ख) 29 (ग) 11 (घ) 9

३. पाँच मिनेटमा कति सेकेण्ड हुन्छन् ?

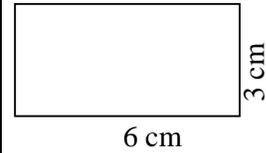
(क) 50 (ख) 150 (ग) 200 (घ) 300

४. रु. 175 को सामान किनेर पसलेलाई रु 500 को नोट दिइयो भने कति रुपियाँ फिर्ता हुन्छ ?

(क) रु.25 (ख) रु.125 (ग) रु.325 (घ) रु.225

५. दायोको चित्रमा देखाईएको आयतको परिमिति कति हुन्छ ?

(क) 9 cm (ख) 18 cm  
(ग) 18 cm<sup>2</sup> (घ) 36 cm



६. एक दर्जन कपीको मूल्य रु. 60 पर्छ भने एउटा कपीको मूल्य कति पर्छ ?

(क) रु.12 (ख) रु.5 (ग) रु.3 (घ) रु.36

७. 5 वर्षमा कति महिना हुन्छन् ?

(क) 12 (ख) 36 (ग) 60 (घ) 90

८. रामले आफ्नो गृहकार्यको  $\frac{3}{5}$  पूरा गरेपछि अब कति काम बाँकी रह्यो ?

(क)  $\frac{2}{5}$  (ख)  $\frac{3}{5}$  (ग)  $\frac{1}{5}$  (घ)  $\frac{5}{2}$

९. दिइएको समूहमा नमिल्ने सङ्ख्या कुन हो ?

$$A = \{3, 6, 9, 12, 14, 15\}$$

(क) 3                      (ख) 15                      (ग) 9                      (घ) 14

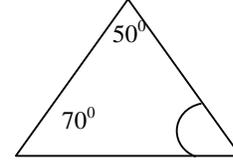
१०. यदि  $x = 5$  र  $y = 6$  भए  $2xy$  को मान कति हुन्छ ?

(क) 60                      (ख) 30                      (ग) 22                      (घ) 13

११. दिइएको चित्रमा बाँकी कोण कति डिग्रीको हुन्छ ?

(क)  $50^\circ$                       (ख)  $70^\circ$

(ग)  $80^\circ$                       (घ)  $60^\circ$



ख) एक शब्द वा वाक्यमा उत्तर लेख:

१२. तीनओटै भुजा बराबर भएको त्रिभुजलाई के भनिन्छ ?

उत्तर :

१३. 10 को 3 गुणाबाट 20 घटाउँदा कति हुन्छ ?

उत्तर :

१४.  $15ab$  बाट  $10ab$  बाट घटाउँदा कति हुन्छ ?

उत्तर :



## उत्तर कुञ्जिका

कक्षा: ५  
विषय: गणित

समय: १ घण्टा  
पूर्णाङ्क: १००

"समूह - क" वस्तुगत प्रश्नहरू: (२०×२=४०)

- |       |                    |        |         |       |
|-------|--------------------|--------|---------|-------|
| १. ख  | २. क               | ३. घ   | ४. ग    | ५. ख  |
| ६. ख  | ७. ग               | ८. क   | ९. घ    | १०. क |
| ११. घ | १२. समबाहु त्रिभुज | १३. 10 | १४. 5ab |       |

"समूह - ख" विषयगत प्रश्नहरू: (१०×६ =६०)

१. $10 - \{15 \div (2 \times 2 + 1)\}$	1
$= 10 - \{15 \div (4 + 1)\}$	2
$= 10 - \{15 \div 5\}$	2
$= 10 - 3$	1
$= 7$	

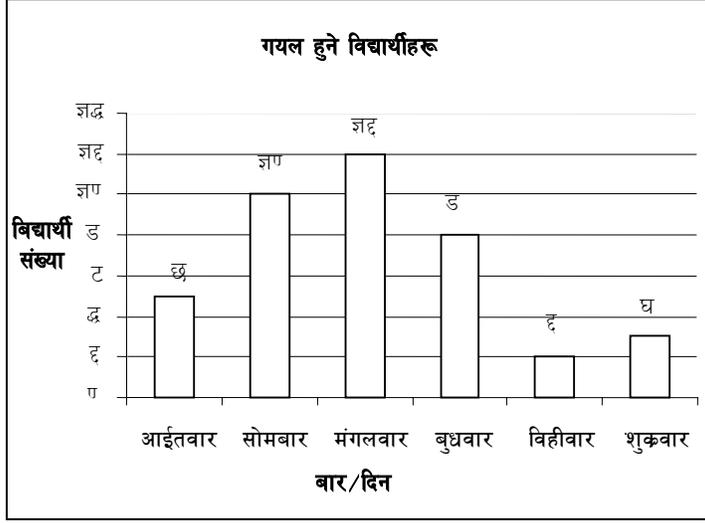
२. घण्टा	मिनेट	सेकेण्ड	
5	12	15	1
		× 8	
40	96	120	2
40	98	0	1
41	38	0	2

३. $5\frac{2}{3} - 2\frac{1}{3}$	
$= \frac{17}{3} - \frac{7}{3}$	2
$= \frac{17 - 7}{3}$	2
$= \frac{10}{3}$	1
$= 3\frac{1}{3}$	1

अरू तरीकाबाट गरेमा पनि अङ्क प्रदान गर्ने ।

४. केटीको सङ्ख्या = 60 को 40%	1
$= 60 \times \frac{40}{100}$	1
$= 24$	2
∴ केटाको सङ्ख्या = 60 - 24	1

५.



वारग्राफमा दिन लेखे	1
विद्यार्थी सङ्ख्या लेखे	1
वारग्राफ बनाएको	4

६. विद्यार्थीले बनाएको त्रिभुज ABC को कोणहरू र तालिकामा उल्लेख गरेको कोणहरू मिल्छ कि मिल्दैन मापन गर्ने ।	
त्रिभुज ABC बनाएको	1
$\angle A$ ठीक नापेको	1
$\angle B$ ठीक नापेको	1
$\angle C$ ठीक नापेको	1
$\angle A + \angle B + \angle C$ जोडेको	2

समाप्त

**Annex VI-6: Grade V: English****Learning Achievement Test**

Grade: V  
Subject: English  
100

Time: 1 hour  
Full marks:

Attempt all the questions

1. Read the following text and do the activities that follow:

A prince had a big dog. The dog's name was Gelert. He was brave and faithful and he loved his master. The Prince loved his dog. One day the prince went into the forest. "Look after my baby son", he said to Gelert. Gelert wagged his tail.

Sometime later the Prince came back. He opened the door. His son was not there. Gelert lay on the floor. There was blood every where.

"You killed my son, my baby son!", he shouted at Gelert. The Prince took his sword and killed his dog, Gelert.

Then he heard a baby. It was his son. He was lying on the floor in a corner. Near the little boy there was a dead wolf. There prince picked up his son.

Then he began to cry, "My brave Gelert! You killed the wolf. You saved my son and now you are dead. I killed you, my dear, faithful dog."

a. Write 'True' or 'False'. (2x4=8)

- i. The dog was brave and faithful. ....
- ii. The Prince killed the wolf. . ....
- iii. The baby was lying on the floor. . ....
- iv. The Prince saved the dog. ....

b. Match the words in Column A with their meanings in Column B. (2x4=8)

Column A	Column B
The Prince went into	a dog.
Gelert was	the forest.
The Prince came back	unhappy.
The Prince killed his dog	sometime later
	with his word.

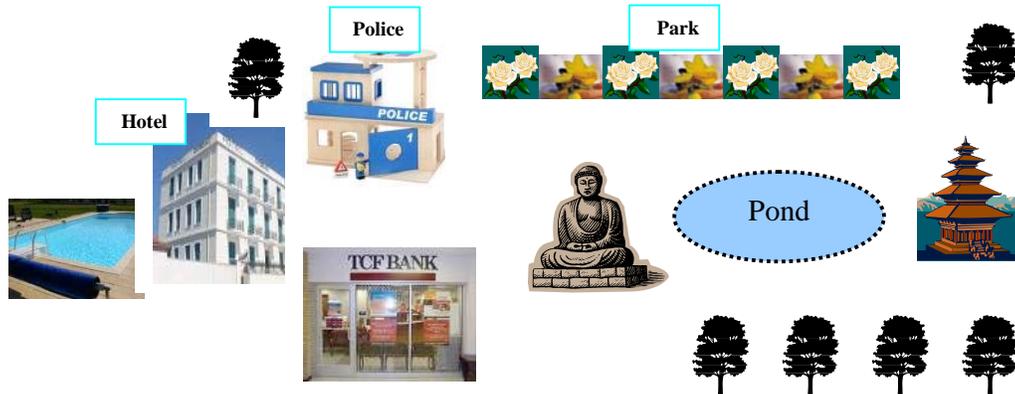
c. Answer the following questions in short. (4x4=16)

- i. What was the dog's name?
- ii. Where did the Prince go?
- iii. Who killed Gelert?

iv. Who began to cry?

2. Look at the map and complete the sentences. Use words or phrases given in the box. (2x5=10)

at the back of    in the middle    in front of    next to    opposite    between



- There is a pond .....the park.
- The pond is ..... the statue and the temple.
- The temple is .....the pond.
- The bank is ..... to the police station.
- There is a big tree .....the hotel.

3. Fill in the blanks with the correct words or phrases given in the brackets. (2x5=12)

- His mother always gets up ..... 6.30 am. ( on/in/at)
- She ..... a good job. ( wants/want/have wanted)
- Do you want ..... orange? ( a/an/x)
- You're a teacher, .....? (are you/aren't you/ isn't you)
- Yesterday I ..... to the market to buy things. ( go/gone/went)

4. Complete this dialogue using the sentences given in the box below: (12)

How many	buy some soap	How much do you want
some money	some sweets	How much is that

Mother : Ram, Sita please go to the shop and .....  
Ram : Yes mother, ..... ?  
Mother : Two bars please. Here's .....  
(The children reach the shop.)  
Ram : Please can we have ..... ?  
Shopkeeper: ..... ?  
Ram : A pocket of sweets. .... ?

5. Write a passage using different doing words. (2x7=14)

Today is Monday, so yesterday ..... Sunday. I usually walk to school but yesterday I ..... to the market. I ..... my purse on the ground but my friend ..... it up. "Be careful", she ..... me. I ..... it in my pocket, then we ..... home.
--

6. Write a letter to your uncle and auntie thanking them for giving tasty meals on a holiday. (20)

The End

## Answers Sheet

Grade: V  
Subject: English

1. Read the following text and do the activities that follow:

a. Write 'True' or 'False'. (2x4=8)

- i. True
- ii. False
- iii. True
- iv. False

b. Match the words in Column A with their meanings in Column B. (2x4=8)

Column A	Column B
The Prince went into	the forest.
Gelert was	a dog.
The Prince came back	sometime later.
The Prince killed his dog	with his word.
	unhappy.

c. Answer the following questions in short (4x4=16)

- i. What was the dog's name? Ans: Gelert.
- ii. Where did the Prince go? Ans: forest.
- iii. Who killed Gelert? Ans: The Prince.
- iv. Who began to cry? Ans: The Prince.

2. Look at the map and complete the sentences. Use words or phrases given in the box. (2x5=10)

- a. There is a pond in the middle of the park.
- b. The pond is between the statue and the temple.
- c. The temple is next to the pond.
- d. The bank is opposite to the police station.
- e. There is a big tree in front of the hotel.

3. Fill in the blanks with the correct words or phrases given in the brackets. (2x5=10)

- a. His mother always gets up at 6.30 am.
- b. She wants a good job.
- c. Do you want an orange?
- d. You're a teacher, aren't you?
- e. Yesterday I went to the market to buy things.

4. Complete this dialogue using the sentences given in the box below: (2x5=10)

Mother : Ram, Sita please go to the shop and buy some soap.  
Ram : Yes mother, How much do you want?  
Mother : Two bars please. Here's some money.  
(The children reach the shop.)  
Ram : Please can we have some sweets?  
Shopkeeper: How many?  
Ram : A pocket of sweets. How much is that?

How many	buy some soap	How much do you want
some money	some sweets	How much is that

5. Write a passage using different doing words. (2x7=14)

Today is Monday, so yesterday was Sunday. I usually walk to school but yesterday I went to the market. I dropped my purse on the ground but my friend picked it up. "Be careful", she told me. I kept it in my pocket, then we came home.

6. Award marks on the basis of the following;

Layout	5
Organisation	5
Subject matter	5
Correctness of language	5

The End

## सिकाइ उपलब्धि परीक्षा

कक्षा: ५

विषय: सामाजिक अध्ययन

समय: १ घण्टा

पूर्णाङ्क: १००

१. ठीक भए (✓) चिन्ह र बेठीक भए (×) चिन्ह लगाउ । (१०×२=२०)
- क) आफूभन्दा सानाले गर्न लागेको काममा उनीहरूलाई मदत गर्नुपर्दछ । ( )
- ख) विवाह गर्ने कार्य सामाजिक कारणअन्तर्गत पर्दछ । ( )
- ग) हाम्रो देशमा दुई तहका अदालतहरू छन् । ( )
- घ) स्काउट तालिमका जन्मदाता वेडेन पावेल हुन् । ( )
- ङ) नेपालमा हिन्दू धर्मालम्बीको सङ्ख्या सबभन्दा कम रहेको छ । ( )
- च) धुम्रपान स्वास्थ्यको लागि हानिकारक हुदैन । ( )
- छ) नेपाललाई प्राकृतिक रूपमा तीन प्रदेशमा विभाजन गरिएको छ । ( )
- ज) मानाङक नामको सिक्काको प्रचलन मानदेवले चलाएका हुन् । ( )
- झ) सार्क सङ्गठनका मुलुकहरूमध्ये माल्दिभ्स सबभन्दा ठूलो मुलुक हो । ( )
- ञ) ग्रहहरूमध्ये सबभन्दा ठूलो ग्रह वृहस्पती हो । ( )
२. खाली ठाउँमा उचित शब्दहरू भर : (१०×२=२०)
- क) रवि ..... वर्षका थिए ।
- ख) रेडक्रसका संस्थापक स्विस नागरिक ..... हुन् ।
- ग) इस्लाम धर्म मान्नेहरूले ईश्वरलाई ..... भन्दछन् ।
- घ) नेपालको सबभन्दा ठूलो ताल ..... हो ।
- ङ) किरातका पहिल्य राजा ..... हुन् ।
- च) नेपाल विश्वमा दोस्रो ठूलो ..... को धनी देश मानिन्छ ।
- छ) नेपालको उत्तरतिर ..... प्रदेश मानिन्छ ।
- ज) बङ्गलादेशको राजधानी ..... हो ।
- झ) ..... ले टुक्राटुकामा विभाजित नेपाललाई एउटै नेपाल बनाएका हुन् ।
- ञ) संसारमा सबभन्दा ठूलो महाद्वीप ..... हो ।
३. जोडा मिलाउ : (१० × २=२०)
- |               |                           |
|---------------|---------------------------|
| “क”           | “ख”                       |
| पाहुनालाई     | नदीहरू                    |
| रारा र फेवा   | धार्मिक कारण              |
| कोसी र गण्डकी | १७% भूभाग ओगटेको          |
| मौलिक हक      | सत्कार                    |
| तराईप्रदेश    | तालहरू                    |
| एस. ओ. एस.    | कैलाशकुट भवन              |
| अंशुवर्मा     | थिम्पु                    |
| वलभद्र कुँवर  | अनाथ र असाहयका लागि सहयोग |
| भुटान         | सन् १९४५                  |

संयुक्त राष्ट्रसङ्घ

नालापानी

नागरिक अधिकार

४. तल दिइएको प्रश्नहरूको सही उत्तरमा (✓) चिन्ह लगाऊ । (५×२=१०)
१. दसैं पर्व कुन धर्मालम्बीले मनाउने गर्दछन् ?  
क) बौद्ध      ख) हिन्दू      ग) क्रिस्चियन      घ) मुस्लिम
२. "हाम्रो आत्मा बचाउ" कुनसँग सम्बन्धित छ ?  
क) स्काउट      ख) रेडक्रस      ग) एस. ओ. एस.      घ) परोपकार केन्द्र
३. नेपालको सबभन्दा लामो नदी कुन हो ?  
क) कोसी      ख) गण्डकी      ग) बागमती      घ) कर्णाली
४. तल दिइएका मध्ये कुन संस्थाले निःशुल्क प्राथमिक शिक्षाका लागि सहयोग गर्ने गर्दछ ?  
क) यु.एन.डि.पी.      ख) युनिसेफ      ग) डब्लु.एच.ओ.      घ) आई. एल. ओ.
५. श्रीलङ्काका मानिसको मुख्य धर्म कुन हो ?  
क) बुद्ध      ख) हिन्दू      ग) इसाई      घ) इस्लाम
५. तलका प्रश्नहरूको छोटो उत्तर देउ : (६×५=३०)
- क) तिम्रो घरमा भएका सामाग्रीहरूमध्ये कुनै दुईओटाको नाम लेखी तीनको एकएक ओटा कार्य लेख ।
- ख) नेपाल रेडक्रस सोसाइटीले गर्ने कुनै दुईओटा कार्यहरू लेख ।
- ग) हाम्रो देशका पुरातात्विक महत्त्वका कुनै प्रमुख पाँचओटा वस्तुहरूको सूची बनाऊ ?
- घ) हाम्रो देशको कार्यपालिकाले गर्ने कुनै दुईओटा कार्यहरू लेख ।
- ङ) संयुक्त राष्ट्रसङ्घका प्रमुख अङ्गहरू मध्ये कुनै चारओटा उल्लेख गर ।
- च) सूर्यवाट सबभन्दा नजिक र सबभन्दा टाढा रहेको ग्रहको नाम लेख ।

समाप्त

## उत्तर कुञ्जिका

कक्षा: ५  
विषय: सामाजिक अध्ययन

समय: १ घण्टा  
पूर्णाङ्क: १००

१. ठीक/बेठीक प्रश्न-प्रत्येक ठीक उत्तरका लागि २ का दरले २० अङ्क प्रदान गर्ने । (१०×२=२०)
- |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| (क) ✓ | (ख) ✓ | (ग) ✗ | (घ) ✓ | (ङ) ✗ | (च) ✗ |
| (छ) ✓ | (ज) ✓ | (झ) ✗ | (ञ) ✓ |       |       |

२. खाली ठाउँ भर-प्रत्येक ठीक उत्तरका लागि २ का दरले २० अङ्क प्रदान गर्ने । (१०×२=२०)
- |             |                |                     |
|-------------|----------------|---------------------|
| क) ११       | ख) हेनरी डयुना | ग) अल्लाह           |
| घ) रारा ताल | ङ) यलम्बर      | च) जलस्रोत          |
| छ) हिमाली   | ज) ढाका        | झ) पृथ्वीनारायण शाह |
| ञ) एसिया    |                |                     |

३. जोडा मिलाउ-प्रत्येक ठीक उत्तरका लागि २ का दरले २० अङ्क प्रदान गर्ने । (१०×२=२०)
- |                     |                           |
|---------------------|---------------------------|
| “क”                 | “ख”                       |
| पाहुनालाई           | सत्कार                    |
| रारा र फेवा         | तालहरू                    |
| कोसी र गण्डकी       | नदीहरू                    |
| मौलिकहक             | नागरिक अधिकार             |
| तराई प्रदेश         | १७% भूभाग ओगटेको          |
| एस. आ. एस.          | अनाथ र असाहयका लागि सहयोग |
| अंशुवर्मा           | कैलाशकुट भवन              |
| वलभद्र कुँवर        | नालापानी                  |
| भुटान               | थिम्पु                    |
| संयुक्त राष्ट्रसङ्घ | सन् १९४५                  |

४. तल दिइएको प्रश्नहरूको सही उत्तरमा (✓) चिन्ह लगाउ-प्रत्येक ठीक उत्तरका लागि २ का दरले १० अङ्क प्रदान गर्ने । (५×२=१०)
- (१) ख (२) ग (३) घ (४) ख (५) क

५. तलका प्रश्नहरूको उत्तर देउ । (५×६=३०)
- क) कुनै उपयुक्त सामाग्रीहरू लेखी ती प्रयोग हुने एकएक ओटा कार्य लेखेमा २.५ का दरले ५ अङ्क दिने । (जस्तै: हलो, कोदाली, हँसिया आदि) ।
- ख) कुनै दुईओटा उपयुक्त कार्य लेखेमा २.५ का दरले ५ अङ्क दिने ।
- ग) घण्टाघर, धरहरा, शिलापत्र, ताम्रपत्र, पुराना ढुङ्गे धाराहरू, पाटी पौवा, मठ मन्दिर, गुम्बाहरू जस्ता वस्तुहरूको नाम लेखेमा प्रत्येकको १ का दरले ५ अङ्क दिने ।
- घ) कुनै दुईओटा उपयुक्त कार्यहरू लेखेमा २.५ का दरले ५ अङ्क दिने ।
- ङ) कुनै चारओटा अङ्गहरू लेखेमा १.२५ का दरले ५ अङ्क दिने ।
- च) सबभन्दा नजिकको बुध र सबभन्दा टाढाको यम लेखेमा प्रत्येकको २.५ को दरले ५ अङ्क दिने ।

समाप्त

## सिकाइ उपलब्धि परीक्षा

कक्षा: ५  
विषय: नेपाली

पूर्णाङ्क: १००  
समय: १ घण्टा

प्रश्न १. तलका कुराहरू राम्ररी पढ र ठीक भए ठीक (✓) चिन्ह र बेठीक भए बेठीक चिन्ह (X) देऊ: (१०)

- (क) वृद्धाले सुगालाई घर ल्याई औषधी लगाइदिइन् ।
- (ख) पासाङ ल्हामु मुस्ताङ जिल्लामा जन्मेकी थिइन् ।
- (ग) पात्रो र भित्तेपात्रो दुवै उपयोगी चिज हुन् ।
- (घ) समयलाई सबैले देख्न सक्छन् ।
- (ङ) संसारकै पहिला नर्स फ्लोरेन्स नाइटिङ्गेल हुन् ।

प्रश्न २. तलका वाक्यमा रहेको खाली ठाउँमा ठीकठीक शब्द छानी खालीठाउँ भर: (१०)

- (क) मानिस एक ..... प्राणी हो । ( समाज / सामाजिक )
- (ख) राम एक ..... विद्यार्थी हो । ( ज्ञानी / ज्ञान )
- (ग) राम्रो कलम पाएर ऊ ..... भयो । ( हर्षित / हर्ष )
- (घ) हाम्रा गुरु धेरै ..... हुनुहुन्छ । ( विद्वान् / विद्या )
- (ङ) ..... सोझा र सज्जन हुन्छन् । ( गाउँ / गाउँले )

प्रश्न ३. तल दिएका शब्दहरूलाई वाक्यमा प्रयोग गर: (१०)  
साँचो, भलमल्ल, अर्ती, उपचार, भलो

प्रश्न ४. तलका वाक्यमा पदसङ्गति मिलेको छैन, पदसङ्गति मिलाएर शुद्ध वाक्य बनाऊ: (१०)

- (क) चराहरू रूखमा बसेको छ ।  
.....
- (ख) महरू विद्यालय जान्छु ।  
.....
- (ग) बहिनी धुरधुर रुन्छ ।

.....  
(घ) धनबहादुर पुतली खेल्छे ।  
.....

(ङ) तँ मामाघर जान्छ ।  
.....

प्रश्न ५. तलको वाक्य राम्ररी पढ, बुझ र अशुद्ध पत्ता लगाई शुद्ध पारी सार: (५)

विद्यार्थिहरू सधैं विद्यालय जान्छ र परिशर्म गरी पर्छन् ।  
..... ।

प्रश्न ६. बायाँका शब्द हेर, बुझ र दायाँबाट ठीकठीक शब्द खोजी जोडा मिलाऊ: (१०)

- |                 |                                     |           |
|-----------------|-------------------------------------|-----------|
| (१) “नदी” कविता | (क) अकबरका मन्त्री                  | (१) ..... |
| (२) सम्पादन     | (ख) असाध्यै                         | (२) ..... |
| (३) वीरबल       | (ग) बस्तु                           | (३) ..... |
| (४) चौपट्टै     | (घ) माधवप्रसाद घिमिरे               | (४) ..... |
| (५) थचक्क       | (ङ) नमिलेका कुरा मिलाउने र सच्याउने | (५) ..... |

प्रश्न ७. तलको अनुच्छेद राम्ररी पढी, बुझी तल सोधिएका प्रश्नहरूको ठीकठीक उत्तर देऊ: (२०)

प्रत्येक प्राणीभित्र ईश्वरको बास हुन्छ । त्यसैले अरूप्रति नराम्रा, नमीठा शब्दहरू प्रयोग नगर, नचिच्याऊ र आवश्यकताभन्दा ठूलो स्वरले नबोल । ठूलोठूलो स्वरले अनावश्यक कुरा बोलेर आफ्नो शक्ति किन खेर फाल्छौ ?

**प्रश्नहरू :**

(क) ईश्वर कहाँ बस्दछन् ?  
.....।

(ख) अरूप्रति के गर्नुहुँदैन ?  
.....।

(ग) अनावश्यक रूपमा चिच्याउँदा के हुन्छ ?  
.....।

(घ) अनावश्यक कुरा भन्नाले के बुझिन्छ ?  
.....।

प्रश्न द. तलका प्रश्नहरूको ठीकठीक उत्तर देऊ: (२५)

(क) आफ्नो लक्ष्य प्राप्त गर्न के गर्नुपर्दछ ?

.....  
.....।

(ख) वृद्धाले सुगालाई भेटाउँदा सुगाको अवस्था कस्तो थियो ?

.....  
.....।

(ग) कोइलीलाई सबैले मनपराउनुको कारण प्रष्टपार ?

.....  
.....।

(घ) हामीले समयलाई कसरी नाप्ने कोसिस गर्दछौं ?

.....  
.....।

(ङ) सागपातमा कुनकुन तत्त्वहरू पाइन्छन् ?

.....  
.....।

समाप्त

## उत्तर कुञ्जिका

कक्षा : ५  
विषय : नेपाली

पूर्णाङ्क : १००  
समय : १ घण्टा

प्रश्न १. तलका कुराहरू राम्ररी पढ र ठीक भए ठीक (✓) चिन्ह र बेठीक भए बेठीक चिन्ह (X) देऊ: (१०)

(क)  (ख)  (ग)  (घ)  (ङ)

प्रश्न २. तलका वाक्यमा रहेको खाली ठाउँमा ठीकठीक शब्द छानी खालीठाउँ भर: (१०)

(क) सामाजिक (ख) ज्ञानी (ग) हर्षित (घ) विद्वान् (ङ) गाउँले

प्रश्न ३. तल दिएका शब्दहरूलाई वाक्यमा प्रयोग गर: (१०)

एउटा वाक्यमा प्रयोग गरेको मिलाएमा २ अङ्कका दरले पाँचैओटा शब्दको वाक्यमा प्रयोग मिलाएमा बढीमा १० अङ्क प्रदान गर्ने ।

प्रश्न ४. तलका वाक्यमा पदसङ्गति मिलेको छैन, पदसङ्गति मिलाएर शुद्ध वाक्य बनाऊ: (१०)

(क) चराहरू रूखमा बसेकाछन् । (ख) म विद्यालय जान्छु । (ग) बहिनी धुर्धुरु रुन्छे ।  
(घ) धनबहादुर पुतली खेल्छ । (ङ) तँ मामाघर जान्छस् ।

प्रश्न ५. तलको वाक्य राम्ररी पढ, बुझ र अशुद्ध पत्ता लगाई शुद्ध पारी सार: (५)

प्रति एक शुद्धताका लागि एक अङ्कका दरले बढीमा पाँच अङ्क प्रदान गर्ने ।  
विद्यार्थीहरू सधैं विद्यालय जान्छन् र परिश्रम गरी पढ्छन् ।

प्रश्न ६. बायाँका शब्द हेर, बुझ र दायाँबाट ठीकठीक शब्द खोजी जोडा मिलाऊ: (१०)

(१) - (घ) (२) - (ङ) (३) - (क) (४) - (ख) (५) - (ग)

प्रश्न ७. तलको अनुच्छेद राम्ररी पढी, बुझी तल सोधिएका प्रश्नहरूको ठीकठीक उत्तर देऊ: (२०)

(क) प्रत्येक प्राणीभित्र ईश्वर बस्छन् ।  
(ख) अरूप्रति नराम्रा र नमीठा शब्दहरू प्रयोग गर्नुहुँदैन ।  
(ग) अनावश्यक रूपमा चिच्याउँदा हाम्रो शक्ति नाश हुन्छ ।  
(घ) अनावश्यक कुरा भन्नाले अरूलाई मन नपर्ने नराम्रा र नमीठा कुरा भन्ने बुझिन्छ ।

प्रश्न ८. तलका प्रश्नहरूको ठीकठीक उत्तर देऊ: (२५)

(क) आफ्नो लक्ष्य प्राप्त गर्न कडा परिश्रम र मेहनत गर्नुपर्दछ ।  
(ख) वृद्धाले सुगालाई भेटाउँदा सुगा छटपटाइरहेको थियो । त्यसले कहिले पखेटा फटफटाउँथ्यो त कहिले खुट्टा तन्काउँथ्यो ।  
(ग) मीठो बोल्नेलाई सबैले मन पराउँछन् । कोइली मीठो बोल्छ त्यसैले कोइलीलाई सबैले मन पराउँछन् ।  
(घ) हामीले समयलाई सेकेन्ड, मिनेट, दिन, हप्ता, महिना र वर्षका रूपमा नाप्ने गर्दछौं ।  
(ङ) सागपातमा भिटामिन, क्याल्सियम, फलाम आदि तत्त्व पाइन्छन् ।

समाप्त

### Annex VII: Score Sheet for Tests

Name of the School: \_\_\_\_\_

Address: \_\_\_\_\_

Grade: 3  5

Note: Fill the score from this achievement test and the score from previous test in the box.

Eg. in the given box, 56 is the previous score and 58 is the current

56	58
----	----

score.

SN	Students ID No.	Name of the Student	Gender	Ethnicity	Score			
					English	Nepali	Math	Social Study
1.								
2.								
3.								
4.								
5.								
1.								
2.								
3.								
4.								
5.								
1.								
2.								
3.								
4.								
5.								
1.								
2.								
3.								
4.								
5.								

Name of the Field Researcher: \_\_\_\_\_

***Annex VIII: List of experts included in the core study team***

1. Dr. Bhawani Shankar Subedi: Education and training expert (study team leader)
2. Dhruva Prasad Dhungel: Training and education expert
3. Usha Bhandari: Training and education expert
4. Dr. Yagya Raj Panta: Teacher training and education expert
5. Dr. Bharat Bilash Pant: Teacher training and education expert
6. Dr. Vishnu Karki: Educational research and teacher training expert
7. Dr. Bidya Nath Loirala: Research expert
8. Krishna Man Pradhan: Statistical analysis expert
9. Sambadan Koirala: Statistical analysis support.

**विद्यालय विवरण**

विद्यालयको नाम:		विद्यालय स्थापना मिति:
विद्यालयको ठेगाना:		
विद्यालयको कोड:		

क. विद्यालयको भौतिक तथा अन्य जानकारीहरू							
१	विद्यालय भवन:	आफ्नै	<input type="checkbox"/>			भाडामा	<input type="checkbox"/>
२	विद्यालय भवनको अवस्था:	राम्रो	<input type="checkbox"/>	सन्तोषजनक	<input type="checkbox"/>	नाजुक	<input type="checkbox"/>
३	प्रा.वि कक्षाहरूमा कक्षाकोठाहरूको पर्याप्तता:	पर्याप्त	<input type="checkbox"/>	पुगेकै छ	<input type="checkbox"/>	पुगेको छैन	<input type="checkbox"/>
४	कक्षाकोठाहरूको अवस्था (भयालढोका, गाह्रो):	राम्रो	<input type="checkbox"/>	सन्तोषजनक	<input type="checkbox"/>	नाजुक	<input type="checkbox"/>
५	कक्षाकोठाहरूको सरसफाईको अवस्था:	राम्रो	<input type="checkbox"/>	सन्तोषजनक	<input type="checkbox"/>	नाजुक	<input type="checkbox"/>
६	विद्यार्थीहरूका लागि पर्याप्त बेन्च कुर्सीको व्यवस्था:	छ	<input type="checkbox"/>	ठिकै छ	<input type="checkbox"/>	पुगेको छैन	<input type="checkbox"/>
७	शौचालयको व्यवस्था:	छ	<input type="checkbox"/>		<input type="checkbox"/>	छैन	<input type="checkbox"/>
७.१	शौचालयको अवस्था:	राम्रो	<input type="checkbox"/>	सन्तोषजनक	<input type="checkbox"/>	नाजुक	<input type="checkbox"/>
८	छात्राहरूको लागि छुट्टै शौचालयको व्यवस्था:	छ	<input type="checkbox"/>		<input type="checkbox"/>	छैन	<input type="checkbox"/>
८.१	छात्राहरूको शौचालयको अवस्था:	राम्रो	<input type="checkbox"/>	सन्तोषजनक	<input type="checkbox"/>	नाजुक	<input type="checkbox"/>
९	खेलमैदानको व्यवस्था:	पर्याप्त	<input type="checkbox"/>	पुगेकै छ	<input type="checkbox"/>	पुगेको छैन	<input type="checkbox"/>
१०	विद्यालय घेरावारको अवस्था:	गरेको छ	<input type="checkbox"/>	ठिकै छ	<input type="checkbox"/>	छैन	<input type="checkbox"/>
११	खानेपानीको व्यवस्था:	राम्रो	<input type="checkbox"/>	सन्तोषजनक	<input type="checkbox"/>	नाजुक	<input type="checkbox"/>
१२	विद्यालय सरसफाईको अवस्था:	सफा	<input type="checkbox"/>	सन्तोषजनक	<input type="checkbox"/>	फोहोर	<input type="checkbox"/>
१३	कक्षाहरूलाई बालमैत्री बनाएको नबनाएको अवस्था:	बनाएको	<input type="checkbox"/>	ठिकै बनाएको	<input type="checkbox"/>	नबनाएको	<input type="checkbox"/>
१४	अतिरिक्त क्रियाकलापहरू संचालन गरेको नगरेको अवस्था:		<input type="checkbox"/>	बेलाबेलामा	<input type="checkbox"/>	गर्दै नगरेको	<input type="checkbox"/>
१४.१	गरेको भए अन्तिम पटक कहिले गरेको ?		<input type="checkbox"/>	मिति:	<input type="text"/>		
१५	अध्ययन भ्रमण लाने गरेको नगरेको अवस्था:		<input type="checkbox"/>	बेलाबेलामा	<input type="checkbox"/>	गर्दै नगरेको	<input type="checkbox"/>
१५.१	लगेको भए अन्तिम पटक कहिले लगेको ?		<input type="checkbox"/>	मिति:	<input type="text"/>		
१६	अभिभावक दिन मनाउने गरेको नगरेको अवस्था:		<input type="checkbox"/>	बेलाबेलामा	<input type="checkbox"/>	गर्दै नगरेको	<input type="checkbox"/>
१६.१	मनाएको भए अन्तिम पटक कहिले मनाएको ?		<input type="checkbox"/>	मिति:	<input type="text"/>		
१७	अभिभावकहरूलाई केटाकेटीहरूबारे जानकारी गराएको नगराएको अवस्था:		<input type="checkbox"/>	बेलाबेलामा	<input type="checkbox"/>	गर्दै नगरेको	<input type="checkbox"/>
१७.१	जानकारी गराएको भए अन्तिम पटक कहिले गराएको ?		<input type="checkbox"/>	मिति:	<input type="text"/>		
१८	शिक्षकहरूसँग विद्यार्थी र विद्यालयबारे छलफल गरेको नगरेको अवस्था:		<input type="checkbox"/>	बेलाबेलामा	<input type="checkbox"/>	गर्दै नगरेको	<input type="checkbox"/>
१८.१	गरेको भए अन्तिम पटक कहिले गरेको ?		<input type="checkbox"/>	मिति:	<input type="text"/>		

विद्यालय कोड:	शैक्षिक सत्र:
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ख. विद्यार्थीहरुसम्बन्धी जानकारी																
तथ्यांकहरु	भर्ना विद्यार्थी संख्या		जांचिदिने विद्यार्थी संख्या		पास हुने विद्यार्थी संख्या		कक्षा दोहोरयाउने विद्यार्थी संख्या		अन्तिम परीक्षाको औषत प्रतिशत							
	छात्रा	छात्र	छात्रा	छात्र	छात्रा	छात्र	छात्रा	छात्र	गणित		सामाजिक		अंग्रेजी		नेपाली	
									छात्रा	छात्र	छात्रा	छात्र	छात्रा	छात्र	छात्रा	छात्र
सबै विद्यार्थीहरु	कक्षा १															
	कक्षा २															
	कक्षा ३															
	कक्षा ४															
	कक्षा ५															
	जम्मा															
दलित समुदायका विद्यार्थीहरु	कक्षा १															
	कक्षा २															
	कक्षा ३															
	कक्षा ४															
	कक्षा ५															
	जम्मा															
जनजाति समुदायका विद्यार्थीहरु	कक्षा १															
	कक्षा २															
	कक्षा ३															
	कक्षा ४															
	कक्षा ५															
	जम्मा															

शिक्षक विवरण

वर्ष:

तह:		जम्मा शिक्षक सँख्या:				महिला:		पुरुष:		वर्ष:																	
क्र.सं.	शिक्षकको नाम	शहर	स्थायी ठेगाना	लिंग	जन्म वर्ष	उमेर	जाति वा समुह	मातृभाषा	धर्म	अपमत्ता*	शैक्षिक योग्यता	हालको नियुक्ति	शिक्षण अनुभव वर्ष	विद्यालयमा काम गर्न शुरू गरेको वर्ष	प.अ. १ मिति तालिम लिएको मिति	शिक्षक तालिम विवरण					तालिम प्राप्त भएको साल	कक्षामा पढाउने विषयहरू					
																पहिलो प्याकेज	दोस्रो प्याकेज	तेस्रो प्याकेज	चौथो प्याकेज	१५० घण्टा	१०० घण्टा		कक्षा १	कक्षा २	कक्षा ३	कक्षा ४	कक्षा ५
१	हरि बहादुर	थापा	लेखनाथ नगरपालिका, कास्की	प	०२०	२४	क्षेत्री	नेपाली	हिन्दू	१	आई.ए.	स्वाधी	१०	०६१	०६४	√	√	√	-	-	-	०६१	नेपाली	नेपाली	नेपाली	नेपाली	अंग्रेजी
प्रधानाध्यापक																											
१																											
२																											
३																											
४																											
५																											
६																											
७																											
८																											
९																											
१०																											
११																											

\*१=शारीरिक अपमत्ता, २=अर्द्धा कमजोर, ३=कम कम सुन्ने, ४=अन्य

**Annex IX: Reporting Format**

NCED/TITI joint study on  
'Contribution of teacher training to primary education development in Nepal.'

**Reporting format**

School:

School type:

District:

<b>No</b>	<b>Research Question</b>	<b>Description of evidences/indicators</b>
1	<b>What is the empirical evidence of the periodic changes (improvement) in overall student's achievement?</b>	
2	<b>What is the empirical evidence of the periodic changes (improvement) in educational wastage?</b>	
3	<b>What is the empirical evidence of the periodic changes (improvement) in</b>	

	<b>access of different groups, including marginalized community to schooling?</b>	
<b>4</b>	<b>What is the empirical evidence of the periodic changes (improvement) in the teachers' overall capacity for teaching delivery and school development?</b>	
<b>5</b>	<b>To what extent has the learning achievement of the trained teachers from the teacher-training program been transferred to the teaching learning performance in the classroom?</b>	

<b>6</b>	<b>To what extent the teacher training and head-teacher training are related (statistically as well as interpretively) to the improvement in the key indicators of primary education development?</b>	
<b>7</b>	<b>How have the teacher training programs addressed the ecological, regional and cultural variations across Nepal?</b>	
<b>8</b>	<b>What are the possible latent factors, which may have affected the changes (positive and/or negative) in relation to inquiry under various research questions?</b>	

9	<b>What specific strategies and policies are imperative for effective teacher training program in the face of emerging requirement of pedagogical and school management context in Nepal?</b>	

### Annex X: School Case Study Guidelines

District:

School Name:

School Type:

Location:

*Reflect on the objectives and contents/competencies of the 10 months primary teacher training curricula. Utilize the themes, guiding questions and probing hints to prepare a school case with reference to 'contribution of teacher training programs to the development of primary education.'*

Theme (Construct)	Guiding question*	Probing hints*
Quality	How has the training of teachers contributed to improve the quality of teaching, learning and performance in terms of <u>students' achievement</u> ?	What actually happens in the classrooms? Is learning taking place? Are learning deficiencies identified? How do teachers encourage students' participation? How do students feel about participating? Is the teaching/learning enjoyable? What methods of teaching/learning are used? How is learning assessed? How is feedback given and received? How do teachers react when their students fail or succeed?
Access	What has been the role of trained teachers towards increasing the <u>access to schooling</u> of children in the communities?	Who gets admission to school? Who doesn't? How is the composition of students' population? (gender? ethnicity? social status? physical ability? disability?). What are the trained teachers doing to increase access and enrolment?
Equity	How do the trained teachers exhibit equity in treating students and other stakeholders at schools and in the community environment?	How are the students treated? (how are boys treated? how are girls treated? younger? older? rich? poor? elites? dalits? backwards?) How are the parents treated? Is school a welcoming environment? How do teachers contribute to this? Is there any discrimination in terms of ethnic origin, gender, caste, age, occupation, economic condition? How do we know? How do teachers react to discriminating situations?
Efficiency	How are the trained teachers contributing to reduce <u>educational wastage</u> by producing better results with limited resources?	How is the current situation and trend of students' retention, drop-out, class repetition and failure? Who drops out and why? When? Who continues? Who transfers? How do teachers utilize learning resources? What do teachers do to prevent educational wastage? Does the school have calendar of operations? Is class routine followed? Are the teachers and students regular/punctual? Has training contributed to reducing educational wastage? How?
Teacher development	How has the training contributed to <u>teachers' overall capacity for teaching and school development</u> ?	Are the trained teachers enthusiastic? Do they enjoy teaching? How do they exhibit self-efficacy? Do they have competence and confidence in teaching? How do they help students' learning and success? How is teacher collegiality? How do they work in teams and as individuals? How committed are the teachers in their profession and students' learning achievement regardless of external factors? How?
Overall school development	How well have the teachers <u>transferred the knowledge and skills from the training to the workplace</u> contributing to school's positive public image and	What values and beliefs are held by teachers about parents and students? What is encouraged? What is discouraged? How do stakeholders perceive the schools affairs? (about teachers? students? relations? norms? practices?) How is the school culture created and maintained? (what is the school known for? (dress code? discipline? teacher competencies? co-curricular activities? social work?

	innovations?	sports competitions? results? learning environment? leadership?). What are the suggestions for policy and strategies?
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*\* These guiding questions and probing hints should be complementing to items included in the 'Interviews', 'Focus Group Discussions' and 'Observations' and other data about the school, students and teachers.*

Instruction: Summarize your findings and write 2 pages for each theme about each school studied. Attach gathered data to support your findings.

**Annex XI: List of Districts and Study Schools**

<b>Region</b>	<b>District</b>	<b>Name of School/s Studied</b>	<b>Field Researchers</b>
<b>Hill</b>	Baglung	Shree Dhimi Karina Secondary School	Keshab Pudasaini
	Bhojpur	Adarsha Shishu Primary School	Ishwar Chandra Ghimire
		Janakalyan Lower Secondary School	
		Yesodhara Secondary School	
	Dailekh	Shree Janta Madhyamik Vidyalaya	Rajendra Dahal
	Dhading	Shree Chandradoya Prastabit Ma. Vi.	Punya Ghimire
	Doti	Barahi lower secondary School	Binod Humagain
		Radha Krishna Higher Secondary School	
	Kavre	Shree chandenee Secondary School	Shanta Budhathoki
		Shree Kushadevi Higher Sec School	
		Shree Shristhikanta Lower Sec School	
	Makwanpur	Shree Amar Ni. Ma. Vi.	Punya Ghimire
	Panchthar	Shree Gadhi Ni. Ma. Vi.	Dinesh Kumar Thapa
	Parbat	Shree Pashupati Ni. Ma. Vi.	Keshab Pudasaini
	Pyuthan	Janata Higher Secondary School	Prakash Ghimire
	Surkhet	Shree Hari Dil Bhumi Primary School	Kashi Raj Pandey
Shree Balmandir Primary School			
Shree Krishna Sanskrit and Sadharan School			
Tahanun	Shree Radha Ma. Vi.	Dinesh Koirala	
	Shree Sarashwoti Ni. Ma. Vi.		
	Shree Shukla Ni. Ma. Vi.		

<b>Mountain</b>	Dolakha	Kalinchok Ucha Madhyamik Vidyalaya	Rajendra Dahal 9741104744
	Jumla	Shree Janta Ma. Vi.	Bhagirathi Niroula 9849187580
		Shree Kalika Pra. Vi.	
		Shree Shammanath Gyan Kunja Ni. Ma. Vi.	
	Mustang	Janahit Higher Secondary School	Mana Bahadur Khatri 9841345110
Rasuwa	Shree Rasuwa Higher Secondary School	Anila Jha 9841888100	
Sindhupalchowk	Shree Gyan Mandir Namuna Higher Secondary School	Mana Bahadur Khatri 9841345110	
<b>Terai</b>	Bara	Shree Tin Chandra School	Prakash Ghimire 9841700052
		Nepal Rastriya Primary School	
	Bardiya	Shree Nepal Rastriya Shambhu Sharan Ma. Vi.	Rajendra Dahal 9741104744
	Dhanusa	Asarphi Sah Primary School, Janakpur	Prakash Koirala 9841204627
		Sankat Mochan Devcharan ramrati Higher Sec. School	
		Shree Secondary School Kuwa rampur	
	Kapilbastu	Ratna Rajya Laxmi High School	Prakash Ghimire 9841700052
	Rupendehi	Pharsatikar Higher Sec School	Samip Khanal 9841830149
		Rudrapur Seondary School	
		Medini Primary Shool	
Siraha	Pashupati Adarsha Ma. Vi.	Dinesh Kumar Thapa 9741113321	
Sunsari	Badrinath Primary School	Sunita Luintel 9841618556	
	Gyanodaya Lower Sec. School		
	Sarada HS School		
<b>Ktm.Valley</b>	Lalitpur	Shree Madan Smarak Higher Secondary School	Anila Jha 9841888100

**Annex XII: Region wise description of teachers on the basis of sex, age group, training, years of experience and educational status**

Region	Category	Sub-category	Count		
			Value	Total	
Hill	Training status	Fully trained	93	147	
		Partially trained	27		
		NA	27		
	Training total			147	
	Sex	Female	62	85	147
		Male	85		
	Sex total			147	
	Age group	< 20 years	-	27	147
		21-30	20		
		31-40	33		
		41-50	52		
		> 50 years	16		
		NA	27		
	Age group total			147	
	Teaching experience	< 5 years	19	12	147
		6-15	31		
		16-25	63		
26-35		18			
>36 years		4			
NA		12			
Teaching experience total			147		
Educational level	<SLC	--	6	147	
	SLC	56			
	Intermediate	37			
	Bachelor	38			
	Masters	10			
	NA	6			
Educational level total			147		
Mountain	Training status	Fully trained	39	52	
		Partially trained	12		
		NA	1		
	Training total			52	
	Sex	Female	25	27	52
		Male	27		
	Sex total			52	
	Age group	< 20 years	1	7	52
		21-30	10		
		31-40	18		
		41-50	17		
		> 50 years	5		
		NA	7		
	Age group total			52	
	Teaching experience	< 5 years	7	2	52
		6-15	13		
		16-25	23		
26-35		7			
>36 years		--			
NA		2			
Teaching experience total			52		
Educational level	<SLC	--	1	52	
	SLC	21			
	Intermediate	18			
	Bachelor	9			
	Masters	3			
	NA	1			
Educational level total			52		
Terai	Training status	Fully trained	98	144	
		Partially trained	19		
		NA	27		
	Training total			144	
	Sex	Female	67	77	144
		Male	77		
	Sex total			144	
	Age group	< 20 years	--	14	144
		21-30	17		
		31-40	42		
		41-50	39		
		> 50 years	22		
		NA	14		
	Age group total			144	
	Teaching experience	< 5 years	17	6	144
		6-15	32		
		16-25	57		
26-35		25			
>36 years		7			
NA		6			
Teaching experience total			144		
Educational level	<SLC	3	8	144	
	SLC	53			
	Intermediate	56			
	Bachelor	22			
	Masters	2			
	NA	8			
Educational level total			144		
Valley	Training status	Fully trained	6	1	
		Partially trained	1		
		NA	1		
	Training total			1	
	Sex	Female	4	4	1
		Male	4		
	Sex total			1	
	Age group	< 20 years	--	2	1
		21-30	3		
		31-40	--		
		41-50	2		
		> 50 years	1		
		NA	2		
	Age group total			1	
	Teaching experience	< 5 years	2	--	1
		6-15	3		
		16-25	1		
26-35		2			
>36 years		--			
NA		--			
Teaching experience total			1		
Educational level	<SLC	--	1	1	
	SLC	6			
	Intermediate	1			
	Bachelor	--			
	Masters	1			
	NA	--			
Educational level total			1		
Educational level total			8		

**Annex XIII: Team Deployment Records: Set A***(Set 'A': ETC 'A' districts plus Jumla)*

10 x 3 = 30 schools

Table 4: Team deployment st A schools/districts

Set	District/s	ETC focal person <i>(Name/s)</i>	Field researcher <i>(Name/s)</i>
'A'	Kabhre	Arjun Bahadur Shrestha 9841394012	Shanta Budhathoki 9741146558
	Surkhet	Nim Prakash Singh Rathour 9848049466	Kashi Raj Pandey 9851093312
	Bhojpur	Sita Ram Shrestha 9842107470	Ishwor Chandra Ghimire 9841232181
	Sunsari	Bhupendra Prasad Koirala 9842049570	Sunita Luintel 9841618556
	Doti	Bishnu Datta Bhatta 9848431034	Binod Humagain 9841447524
	Bara	Pralhad Barnawal 9845093763	Prakash Ghimire 9841700052
	Tanahu	Govinda Prasad Pokhrel 9846033044	Dinesh Koirala 9841368375
	Dhanusha	Sunil Kumar Mallick 9854021419	Prakash Koirala 9841204627
	Rupandehi	Nara Hari Aryal 9847033899	Samip Khanal 9841830149
Jumla	Nim Prakash Singh Rathour (support from Surkhet) 9848049466	Bhagirathi Niroula 9849187580	

**Annex XIV: Team Deployment Records: Set B**

Table 5: Team deployment for set B districts/schools

Set	<i>Districts</i>	Field researcher**
	Panchthar Siraha	Dinesh Kumar Thapa 9741113321

‘B’	Dhading	Makawanpur	Punya Ghimire 9841670405
	Baglung	Parbat	Keshab Pudasaini 9841398898
	Pyuthan	Kapilbastu	Prakash Ghimire
	Bardiya	Dailekh	Rajendra Dahal
	Rasuwa	Lalitpur	Anila Jha
	Sindhupalchowk	Dolakha	Mana Bahadur Khatri 9841345110
	Mustang	x	Mana Bahadur Khatri 9841345110

*\*\* School selection for set B districts were finalized with the help of NCED/ETC and/or concerned DEO.*

*\*\* One field researcher studied two schools of two districts.*

## **Annex XV: Field plan and instructions for researchers**

### For set 'A' schools

1. Obtain data collection instruments and necessary instructions
  - a. Obtain letter form NCED to ETC, from ETC to sampled schools
  - b. Obtain all required sets of data collection instruments for this set of schools.
  - c. Take with you a copy of recommended field plan and instructions
  - d. Obtain logistics and arrangements for your travel and stay in the field.
2. Organize and plan your activities
  - a. Plan for time utilization and for gathering required data
  - b. Plan for recording and organizing of the data
  - c. Plan for reporting of the data
  - d. Obtain a 'work-log' and record your involvement.
3. Visit ETC 'A' in the selected district/s (*and one team of 2 will go to Jumla*)
  - a. Meet ETC 'A' in-charge and trainers (general and subject specific)
  - b. Select 3 different types of schools as samples
  - c. Discuss with the trainers/training providers, RPs/APs
  - d. Locate the selected schools, trained teachers, head teachers....
4. Spend at least '3 full days' at each school to gather required amount of data (quantitative and qualitative) and maintain proper records of the following:
  - a. School profile: school type, primary, primary wing of lower secondary school, primary wing of secondary school, primary wing of higher secondary school
  - b. Student details with past 3 to 5 years' results
  - c. Teacher profile: age group, sex, caste/ethnicity, language, experience, no of training taken, work load, service status, political orientation/background.
  - d. Student profile: grades, sex, ethnicity/caste, language group, composition of student/teacher population, ratio, per grade SCR/STR.
  - e. Physical facilities of the school: well-equipped, moderately equipped, ill-equipped, non-equipped... background, history, establishment, location, features
5. Collect required documents and study
  - a. Collect and study organization chart, student records, staff records, school calendars, routines
  - b. Archival records, minutes of meetings, journals, databases, programs and budgets, SIP, etc
  - c. Collect and compile primary grades students' results of the past 3-5 years
  - d. Draw 'students cohort' to show retention and dropout rates.

6. Conduct 'researcher designed' achievement tests and record the results of the achievement tests.
  - a. Conduct four sets of achievement tests for grades 3 and 5 completers (5 students randomly selected from among grades three and five completers for each of the four subjects: English, Math, Social studies, Nepali)
  - b. Score these tests using the scoring keys
  - c. Compare achievement test results with the school's exam results in those four subjects and draw conclusions.
7. Conduct at least 3 class observations in grades 1 – 5 as available (preferably in grades 3 and 5).
  - a. Observe trained teacher's classes using observation instrument and criteria
  - b. Observe school context using the same instrument
  - c. Compile the observation data and make initial remarks as your interpretation/s.
8. Conduct 'teacher interviews' (with all individual teachers who received the 10 month's primary teacher training)
  - a. Conduct in-depth interviews with the trained teachers who teach in grades 1-5
  - b. Compile teacher interview data and note your initial remarks as your interpretation/s.
9. Conduct 'head teacher interview', stakeholders interviews and focus group discussions using the open ended questions as given in the guidelines
  - a. Conduct in-depth interview with the head teacher using the instrument
  - b. Compile all interview and focus group data and note your initial remarks as your interpretation/s.
  - c. Leave the school with thanks courtesy.
10. Link various data sources and prepare a report of each school studied
  - a. Organize data for deriving meanings by integrating them
  - b. Make links with quantitative and qualitative data (documents, profiles, school records, achievement test scores compared with school results, reflecting back on the 3-5 years results and other data...)
  - c. Make triangulations where appropriate
  - d. Refer to each theme/construct and research questions.
  - e. Prepare a brief report (4-5 pages) about each school that you have visited and studied (this is for set 'A' sample schools).
11. Refer to each theme/construct and the research questions while preparing report.
12. Attach all forms and data that you have gathered and/or generated about each school to support your findings and the report.

For set 'B' case study schools

1. Obtain data collection instruments and necessary instructions
  - a. Obtain letter form NCED to ETC, from ETC to sampled schools,
  - b. Obtain required sets of data collection instruments: school info, school details, teacher info, student details, teacher/head teacher interview guidelines, stakeholders' interview guidelines, FGD guidelines, observation instrument....
  - c. Take with you and follow the 'school case preparation guidelines'
  - d. Take with you and follow the recommended field plan

- e. Obtain logistics and arrangements for your travel and stay.
- 2. Organize and plan your activities
  - a. Plan for time utilization and gathering required data
  - b. Plan for recording and organizing of the data
  - c. Plan for reporting of the data
  - d. Obtain 'work-log' and record your involvement
- 3. Contact/visit ETC/DEO of the selected district/s
  - a. Contact/visit ETC in-charge and trainers (general and subject specific)
  - b. Select 1 primary school (or primary wing of selected lower secondary/secondary/higher secondary school) from the district
  - c. Conduct personal interviews using stakeholders' interview guidelines
  - d. Conduct teacher interview with all trained teachers.
  - e. Conduct head teacher interview.
  - f. Conduct focus group discussions using the FGD guidelines asking open ended questions.
- 4. Stay at least for ' 5 full days' in the selected school and gather required amount of data (quantitative and qualitative) and maintain proper records of the following
  - a. School profile: school type, primary, primary wing of lower secondary school, primary wing of secondary school, primary wing of higher secondary school
  - b. Context and surroundings of the school/community
  - c. Teacher profile: age group, sex, caste/ethnicity, language, experience, no of training taken, work load, service status, political orientation/background.
  - d. Student profile: grades, sex, ethnicity/caste, language group, composition of student/teacher population, ratio, per grade SCR/STR.
  - e. Physical facilities of the school: well-equipped, moderately equipped, ill-equipped, non-equipped... background, history, establishment, location, features
- 5. Conduct document study
  - a. Collect and study organization chart, student records, staff records, school calendars, routines
  - b. Archival records, minutes of meetings, journals, databases, programs and budgets, maps, etc
  - c. Analyze examination results, especially of the primary grades of the past 3 -5 consecutive years.
  - d. Prepare a 'students cohort' and 'teacher cohort' to check retention trends.
- 6. Conduct achievement tests using 'researcher designed' test items and record the results of achievement tests.
  - a. Conduct four sets of achievement tests in grades 3 and 5 for four subjects
  - b. Compare these test results with the school's latest quarterly tests.
  - c. Collect and compile students results of the past 5 years
- 7. Conduct at least 2 class observations in grades 1 – 5 as available
  - a. Observe trained teacher's classes using observation instrument and criteria

- b. Record and retrieve observation data for interpretations
- 8. Conduct 'teacher interviews' (with individual teachers who received 10 months primary teacher training) and 'focus group discussions' (with all these teachers in group).
  - a. Personal in-depth interviews with trained teachers who teach in grades 1-5
  - b. Focus group discussion with all teachers who received the 10 months primary teacher training.
- 9. Create a group of 'focus students' (at least 3 students of grades 1-5 and collect multiple data from them)
  - a. Watch them in action and reaction closely ,take photos as appropriate
  - b. Ask them to write poems or stories about 'good things' as well as of 'bad things' about their teacher/s and school
  - c. Ask students about teachers, teaching-learning environment, enjoyable moments, exciting events- study habits, likes, dislikes, emotions... as appropriate in the context
  - d. Record these data and use for unfolding truth about school quality, contribution of teachers, teachers' behaviors, learning achievements, latent factors leading to students' success/failure, school's image, teachers' training...
- 10. Conduct head teacher interview
  - a. initial interview with open-ended questions
  - b. in-depth interview before you leave the school
- 11. Conduct stakeholders' interviews/focus group discussions with parents, PTA/SMC members, DEOs/supervisors using open-ended questions as given in the guidelines
  - a. Conduct individual and/or group interviews/focus group discussions with the stakeholders
  - b. Take note of and narrate their success stories, failures, lessons learnt, sorrows and happiness (capture their perspectives as feelings and perceptions about the school, teachers, head teacher, students, community, their involvement, expectations etc..)
  - c. Link those perspectives to claim 'contribution of teacher training programmes to primary education development' in Nepal.
- 12. Use 'school case preparation guidelines' for linking all sources of data.
- 13. Organize and interpret the multiple sources of data
  - a. Organize data for deriving meanings and for integrating them
  - b. Make links with documents, profiles, school records, interviews, focus groups, FGDs...
  - c. Make triangulations where appropriate
  - d. Link with quotes, exciting stories, narratives, events and observations
  - e. Interpret from the perspectives of the stakeholders and key informants
  - f. Refer to each theme, guiding question and probing hints.
- 14. Reflect on each theme, research question, and probing hints indicated in the 'school case preparation guidelines'.
- 15. Prepare school case report by summarizing your observations and findings. Write 12 pages (2 pages for each theme/construct, i. e. 2 x 6 = 12) about each school studied. Attach all data that you have gathered and/or generated in your report to support your interpretations and findings.

**Annex XVI: Teacher competence by education**

Performance category	Education group	Rating scale (4 indicates high performance level)				Grand Total
		1	2	3	4	
<b>Preparing ability</b>						
Lesson Plan Availability	N/A			2	1	3
	SLC	29	13	13	2	57
	Higher Secondary	12	9	11		32
	Bachelors	7	3	1	1	12
	Masters	1	1			2
Lesson Plan Availability Total		49	26	27	4	106
Resources Availability	N/A		2		1	3
	SLC	12	16	23	5	56
	Higher Secondary	10	9	13	6	38
	Bachelors	5	2	4	2	13
	Masters		1		1	2
Resources Availability Total		27	30	40	15	112
Facilities Arranged	N/A		2		1	3
	SLC	7	17	25	6	55
	Higher Secondary	7	13	13	4	37
	Bachelors	3	4	4	3	14
	Masters		1		1	2
Facilities Arranged Total		17	37	42	15	111
<b>Presentation ability</b>						
Effective Body Language	N/A		1	1	1	3
	SLC	1	2	20	17	40
	Higher Secondary		3	12	17	32
	Bachelors		2	1	5	8
	Masters		1		1	2
Effective Body Language Total		1	9	34	41	85
Eye Contact	N/A			2	1	3
	SLC	3	7	23	24	57

	Higher Secondary	1	4	18	16	39
	Bachelors	1	2	5	6	14
	Masters		1	1		2
Eye Contact Total		5	14	49	47	115
Non-Distracting Gestures	N/A		2		1	3
	SLC	2	14	22	12	50
	Higher Secondary	2	8	17	11	38
	Bachelors	1	2	6	5	14
	Masters		1		1	2
Non-Distracting Gestures Total		5	27	45	30	107
Clear Voice	N/A			2	1	3
	SLC	1	2	18	34	55
	Higher Secondary	1	1	16	21	39
	Bachelors	1			13	14
	Masters			1	1	2
Clear Voice Total		3	3	37	70	113
Understandable Words	N/A			2	1	3
	SLC	1	3	16	34	54
	Higher Secondary		4	12	23	39
	Bachelors	1		1	12	14
	Masters		1		1	2
Understandable Words Total		2	8	31	71	112
Relevant Materials	N/A			2	1	3
	SLC	11	8	21	13	53
	Higher Secondary	8	8	8	15	39
	Bachelors	2	3	4	4	13
	Masters		1		1	2
Relevant Materials Total		21	20	35	34	110
Sequential Presentation of Materials	N/A		2		1	3
	SLC	11	11	22	9	53
	Higher Secondary	6	9	12	10	37

	Bachelors	2	2	5	4	13
	Masters		1		1	2
Sequential Presentation of Materials Total		19	25	39	25	108
Exemplary Information	N/A			2	1	3
	SLC	3	11	25	15	54
	Higher Secondary	3	8	18	11	40
	Bachelors	1	2	5	6	14
	Masters		1	1		2
Exemplary Information Total		7	22	51	33	113
Repeated Information Flow	N/A			2	1	3
	SLC	5	11	27	12	55
	Higher Secondary	2	12	18	8	40
	Bachelors	4	2	3	4	13
	Masters		1		1	2
Repeated Information Flow Total		11	26	50	26	113
Expected Behavior Communicated	N/A		1	1	1	3
	SLC	5	11	25	12	53
	Higher Secondary	2	9	23	5	39
	Bachelors	1	2	7	2	12
	Masters		1		1	2
Expected Behavior Communicated Total		8	24	56	21	109
Varieties of Methods Used	N/A		1	1	1	3
	SLC	6	10	28	11	55
	Higher Secondary	5	11	18	5	39
	Bachelors		6	3	3	12
	Masters		1		1	2
Varieties of Methods Used Total		11	29	50	21	111
Methods Match with Content	N/A			2	1	3
	SLC	5	12	24	15	56
	Higher Secondary	2	10	16	11	39

	Bachelors		3	6	3	12
	Masters		1		1	2
Methods Match with Content Total		7	26	48	31	112
Learners Involvement	N/A			2	1	3
	SLC	3	11	19	17	50
	Higher Secondary	3	9	12	15	39
	Bachelors		2	7	4	13
	Masters		1		1	2
Learners Involvement Total		6	23	40	38	107
Learners Fairly Involvement	N/A		2		1	3
	SLC	4	10	19	21	54
	Higher Secondary	4	8	12	14	38
	Bachelors	1	1	5	6	13
	Masters	1			1	2
Learners Fairly Involvement Total		10	21	36	43	110
Use of Subject Specific Materials	N/A		1	1	1	3
	SLC	15	8	18	14	55
	Higher Secondary	10	6	14	8	38
	Bachelors	4	2	3	4	13
	Masters		1		1	2
Use of Subject Specific Materials Total		29	18	36	28	111
Use of locally Used Materials	N/A		2		1	3
	SLC	15	15	13	10	53
	Higher Secondary	11	13	6	7	37
	Bachelors	4	2	4	3	13
	Masters		1		1	2
Use of locally Used Materials Total		30	33	23	22	108
Resouces add to the learning experience	N/A			2	1	3
	SLC	10	16	24	4	54
	Higher Secondary	12	5	13	4	34
	Bachelors	3	1	7	1	12

	Masters		1	1		2
Resources add to the learning experience Total		25	23	47	10	105
Proficient use of resources	N/A		1	1	1	3
	SLC	12	13	22	7	54
	Higher Secondary	9	8	12	7	36
	Bachelors	4		5	3	12
	Masters	1			1	2
Proficient use of resources Total		26	22	40	19	107
Learners name used	N/A		1	1	1	3
	SLC	4	14	19	20	57
	Higher Secondary	5	13	12	10	40
	Bachelors	4	1	4	4	13
	Masters			2		2
Learners name used Total		13	29	38	35	115
Questions frequently asked	N/A			2	1	3
	SLC	3	11	27	17	58
	Higher Secondary	1	8	21	9	39
	Bachelors	1	3	3	6	13
	Masters			1		1
Questions frequently asked Total		5	22	54	33	114
<b>Assessment and feedback</b>						
Encouraging Feedback	N/A			2	1	3
	SLC	1	6	28	17	52
	Higher Secondary	1	4	27	7	39
	Bachelors	1	2	5	5	13
	Masters		1		1	2
Encouraging Feedback Total		3	13	62	31	109
Assessment of Learners	N/A		2		1	3
	SLC	5	13	30	10	58
	Higher Secondary	1	14	18	7	40
	Bachelors		3	7	3	13

	Masters		1	1		2
Assessment of Learners Total		6	33	56	21	116
Encouragement and Feedback	N/A		1	1	1	3
	SLC	1	14	31	10	56
	Higher Secondary	2	8	22	7	39
	Bachelors		5	3	4	12
	Masters			1	1	2
Encouragement and Feedback Total		3	28	58	23	112
Teacher moves among learners	N/A		2		1	3
	SLC	2	12	29	13	56
	Higher Secondary	2	7	10	19	38
	Bachelors	1	2	5	5	13
	Masters			1	1	2
Teacher moves among learners Total		5	23	45	39	112
<b>Concluding the lesson</b>						
Content and objectives reviewed	N/A			2	1	3
	SLC	7	10	31	8	56
	Higher Secondary	2	5	23	8	38
	Bachelors	3	4	4	2	13
	Masters		1	1		2
Content and objectives reviewed Total		12	20	61	19	112
Class ends on time	N/A			2	1	3
	SLC	4	7	24	19	54
	Higher Secondary		1	8	25	34
	Bachelors	1	2	3	5	11
	Masters			2		2
Class ends on time Total		5	10	39	50	104
<b>Learning transfer strategies</b>						
Homework with directions	N/A		1	2		3
	SLC	2	11	34	11	58
	Higher Secondary		5	19	12	36
	Bachelors	1	5	5	3	14

	Masters		1	1		2
Homework with directions Total		3	23	61	26	113
Project work with directions	N/A	1	2			3
	SLC	15	19	12	7	53
	Higher Secondary	12	10	6	3	31
	Bachelors	7		2	3	12
	Masters		1	1		2
Project work with directions Total		35	32	21	13	101
Practice Opportunities	N/A		2	1		3
	SLC	3	11	27	15	56
	Higher Secondary	5	7	16	8	36
	Bachelors	3	1	6	3	13
	Masters		1		1	2
Practice Opportunities Total		11	22	50	27	110
Grand Total		476	862	1657	1081	4076

**Annex XVII: Teacher competence by Gender**

Performance category	Sex	Rating scale (4 indicates high performance level)				Total
		1	2	3	4	
<i>Preparation ability</i>						
Lesson Plan Availability	F	27	14	15	1	57
	M	22	12	12	3	49
Resources Availability	F	13	19	20	7	59
	M	14	11	20	8	53
Facilities Arranged	F	8	20	24	6	58
	M	9	17	18	9	53
<i>Presentation ability</i>						
Effective Body Language	F	1	6	21	17	45
	M		3	13	24	40
Eye Contact	F	3	9	27	21	60
	M	2	5	22	26	55
Non-Distracting Gestures	F	3	17	23	15	58
	M	2	10	22	15	49
Clear Voice	F	1	3	23	33	60
	M	2		14	37	53
Understandable Words	F	1	5	18	33	57
	M	1	3	13	38	55
Relevant Materials	F	13	10	15	20	58
	M	8	10	20	14	52
Sequential Presentation of Materials	F	11	11	20	13	55
	M	8	14	19	12	53
Exemplary Information	F	6	9	28	16	59
	M	1	13	23	17	54
Repeated Information Flow	F	8	13	27	14	62
	M	3	13	23	12	51
Expected Behavior Communicated	F	4	15	30	8	57
	M	4	9	26	13	52
Varieties of Methods Used	F	7	17	24	11	59
	M	4	12	26	10	52
Methods Match with Content	F	7	13	24	16	60

	M		13	24	15	52
Learners Involvement	F	5	13	24	13	55
	M	1	10	16	25	52
Learners Fairly Involvement	F	6	14	17	21	58
	M	4	7	19	22	52
Use of Subject Specific Materials	F	17	10	17	15	59
	M	12	8	19	13	52
Use of locally Used Materials	F	16	18	9	12	55
	M	14	15	14	10	53
Resources add to the learning experience	F	15	11	28	4	58
	M	10	12	19	6	47
Proficient use of resources	F	15	10	19	12	56
	M	11	12	21	7	51
Learners name used	F	4	16	19	22	61
	M	9	13	19	13	54
Questions frequently asked	F	3	15	29	15	62
	M	2	7	25	18	52
<i>Assessment and feedback</i>						
Encouraging Feedback	F	1	8	29	20	58
	M	2	5	33	11	51
Assessment of Learners	F	5	18	31	8	62
	M	1	15	25	13	54
Teacher moves among learners	F	1	12	23	23	59
	M	4	11	22	16	53
<i>Concluding the lesson</i>						
Content and objectives reviewed	F	5	12	34	10	61
	M	7	8	27	9	51
Class ends on time	F	5	5	21	26	57
	M		5	18	24	47
<i>Use of transfer strategies</i>						
Homework with directions	F	3	11	36	12	62
	M		12	25	14	51
Project work with directions	F	16	16	13	10	55
	M	19	16	8	3	46
Practice Opportunities	F	3	13	29	14	59
	M	8	9	21	13	51
<b>Grand Total</b>		<b>476</b>	<b>862</b>	<b>1657</b>	<b>1081</b>	<b>4076</b>

## ***Annex XVIII: Study Scope and Terms of Reference***

### *(a) Background*

The history of teacher training in Nepal is fairly short as is the states' initiative for educational development. The scaled up teacher training program began in 1971 with a systematic and formal approach as the country, for the first time ever, experimented a radically centralized reform of the education system. Since then the expansion of primary schools and the magnitude of teacher demand has been phenomenal. Obviously, recruiting and deploying required number of qualified and skilled teachers remained virtually impossible. Therefore, the government had no choice but to accept the enormous challenge of building teachers' capacity through the systematic organization and management of large scale training programs. The budgetary implication for the state had been understandably huge. More than 100 million US dollars have already been spent in the last 50 years or so. Nonetheless, the output has been quite visible since more than 70% of the primary school teachers are now fully trained through the 10 month course, and about 15% teachers are trained through acquiring qualification of intermediate degree in education stream. At least 15% teachers are trained partially in the basic package and the rest 15% are fully untrained till to date.

### *(b) Objectives*

Research is expected to yield ample empirical evidence required for the comprehensive documentation specifically on the following aspects:

1. The contribution of teacher training programs to the improvement of key education, development indicators (such as student achievement, reduction in drop out rate, access and improvement in professional capacity of teachers) in Nepal;
2. The strengths and weaknesses of existing teacher training programs in Nepal which may need policy, technical and / or administrative response(s) to achieve optimal training effectiveness for the development of the primary education;
3. Appropriate and feasible policy options related to teacher training programs; and,
4. Provide baseline database for impact evaluation of teacher training in future.

### *(c) Scope of the Services,*

The proposed research seeks to be quite comprehensive. Accordingly, its scope is quite large as elaborated below. The research would:

- (i) Review national and international experience of teacher training programs- specifically focusing on the state-of-the-art and innovative initiatives. Prepare an historical chronology of teacher education programs organized in Nepal, categorized according to specific historical periods (e.g. NESP or 1971, during Seti project or the decade of 1970s, 1981 to pre- BPEP, and during the period from the start of EFA till to date).
- (ii) Categorically analyze and critique how different inquiry orientations inform the conceptual framework and methodology of the programs and the research/evaluations/M&E processes on those. Analyze and critique how cause and effect relationships of system and socio-cultural variables have been established by the research and evaluation of the programs reviewed. Analyze the status of primary school teachers in the context of the on-going structural reform and the implementation of the school sector approach.
- (iii) Based on statistical and interpretive approaches, find out credible evidence of how the performance of trained teachers have contributed to the students' learning achievement (by comparing their scores in the regular examinations and / or standardized tests administered for the purpose).
- (iv) Analyze the trends of periodic improvements in educational wastage and find out the relationship between performance of the trained teachers and the improvements.
- (v) Examine the trends of enrollment of children especially those who belong to DAG and marginalized community and find out how the teacher training may have contributed to the cases of increased enrolment (access) to the schooling.
- (vi) Prepare a comprehensive capacity profile of teachers and analyze the extent of utilization of the capacity in preparing for and delivering the teaching as well as overall school development role.
- (vii) Assess the on-going teaching learning process in the real classrooms and find out to what degree the skills and knowledge learnt in the relevant training is being applied by the teacher in the classrooms (by making comparison between major competencies offered in the training and the performance in the classroom)
- (viii) Using the positivist and interpretive approaches, collect quantitative and qualitative data from the cross section of different groups of stakeholders and analyze how teacher and head teacher training programs may have contributed to the achievement in the key primary education indicators such as student promotion, retention, drop outs and learning achievement along with access of girls and DAG children to primary education and their learning achievements.

- (ix) Analyze the specific school context in terms of ecological, regional and cultural variations and assess how instrumental the trained teachers and head- teachers have been in persuading the SMC, local and central administration to draw any special technical and financial resources necessary for the school. Analyze whether this aspect is included in teacher and head teacher training programs and whether the issues of differential pedagogical and managerial needs of schools have been addressed financially and technically.
- (x) Examine various aspects of teacher training and the working environment of the trained teachers: (a) existing training policies, (b) coverage and relevance of teacher training and HT training programs, (c) training implementation arrangement, (d) RC based teacher support mechanism, (e) teachers' attitude, (f) teacher management policies and practices, (g) school management and facilities, (h) academic and socio-economic background of the teachers in order to find out varied attributes to influence the realization of training effectiveness in the ground reality.
- (xi) Identify the underlying factors which may have affected changes (positive and / or negative) in relevant matters being inquired under all research questions.
- (xii) Analyze perceptions/opinions/critiques of teachers, SMS members, parents, school heads, training professionals and other relevant stakeholders in order to substantiate the quantitative and qualitative data for the triangulation.
- (xiii) Draw lessons from the analysis carried out and make appropriate and viable recommendations for training policy reform, curriculum revision and for improvements in other relevant aspects of training design/materials, implementation and management so that the training program would have optimum impact on the education development indicators.

*(d) Training*

In terms of execution of Research activities. NCED conducts orientation of research theme to the researcher of award contracted firms. After commencement of the study, NCED conducts sample presentation of the field databased on the presentation, sharing for training research process is also administered at NCED. Finally, in the orientations the monitoring will also be involved.

*(e) Reports, Deliverables and Time Schedule, and*

As mentioned in the contract award agreement.

*(f) Data, Local Services, Personnel, and Facilities to be provided by the Client.*

As mentioned in the contract award agreement.